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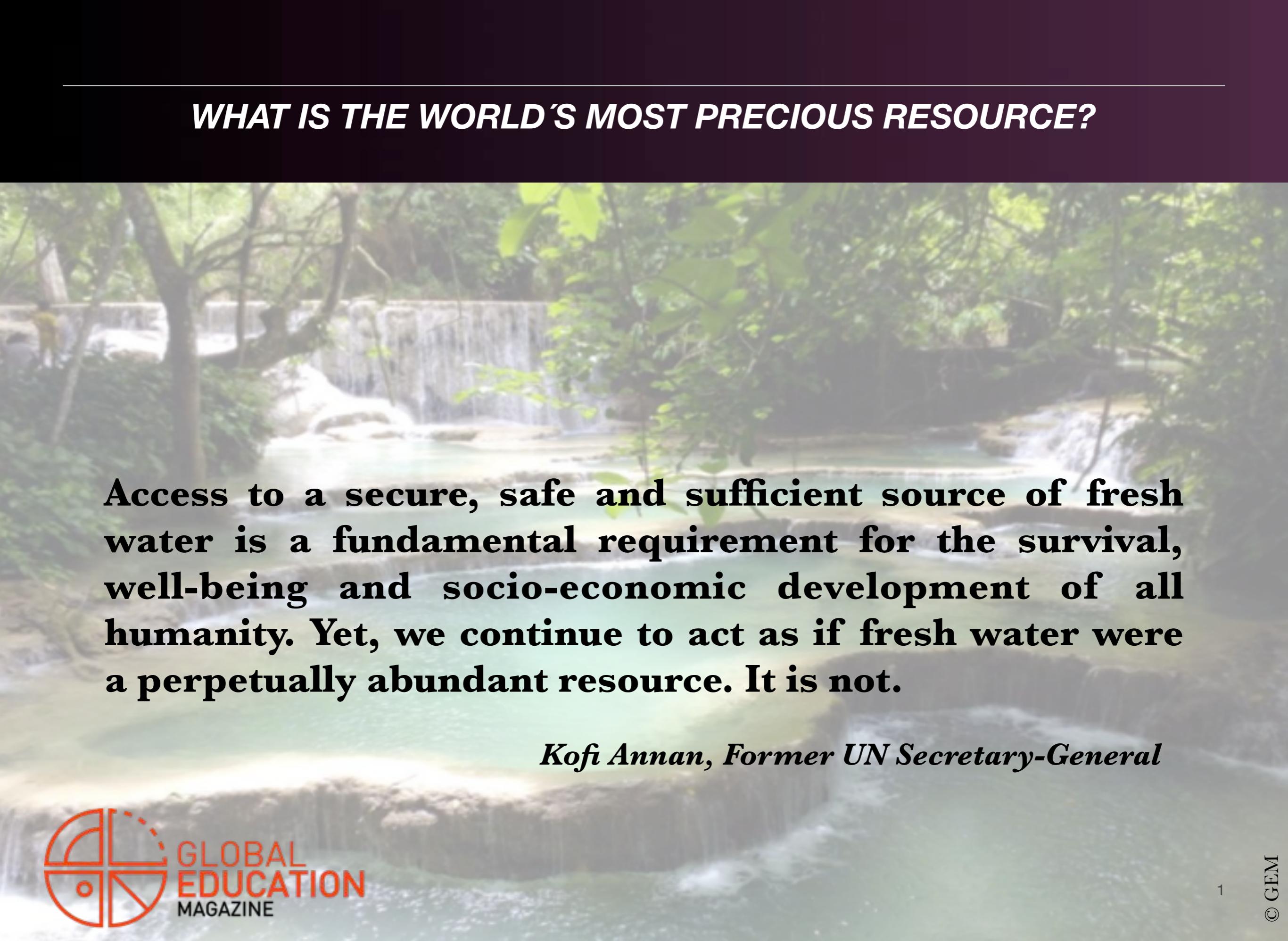
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WHAT IS THE WORLD'S MOST PRECIOUS RESOURCE?

A photograph of a waterfall cascading down a rocky cliff into a pool of water, surrounded by dense green trees and foliage.

Access to a secure, safe and sufficient source of fresh water is a fundamental requirement for the survival, well-being and socio-economic development of all humanity. Yet, we continue to act as if fresh water were a perpetually abundant resource. It is not.

Kofi Annan, Former UN Secretary-General

Letters from the Future for the Generation of 2015: Water and Sustainable Development

Today, March 22 of the year 2093, we the people of the Earth Confederation celebrate the first century of **World Water Day**, adopted by the United Nations General Assembly on December 22, 1992. We believe we have discovered the way to distort the space-time to bring this letter to the generation of 2015, where the whole humanity faces the challenge of achieving the targets of the **Sustainable Development Goals**. This is a letter to encourage a transnational reflection to achieve an effectively future management of water policies, especially for the three dimensions of sustainable development: social, economic, and environmental. We hope to raise awareness which will make the 2015 global citizens participate, on a representative and direct basis, in the construction of a water policy at the local, national and international level; a global citizenship movement with a transdisciplinary approach that captures the interconnections between food, health, energy, trade, environment, and water.

The International Decade for Action, “**Water for Life 2005–2015**”, was an attempt to ensure available and sustainable water management. But you, our great-grandparents, grandparents, and parents, ignored the many recommendations of environmentalists and worldwide experts, from Stockholm in 1972, the Club of Rome in 1973, the “Brundtland Commission” and the report *Our Common Future* in 1987, the Earth Summit in 1992, the Action Program of Barbados in 1994, the Summit for Social Development in Copenhagen in 1995, the Kyoto Protocol in 1997, the Millennium Declaration with the **Millennium Development Goals** in 2000, Johannesburg 2002, *Rio+20* in 2012, among many others. Today, we cry because of your irresponsibility to preserve life and to achieve a sustainable development. We cry because you have failed us with your irrational consumption habits of exploitation and depletion of natural resources. We cry for the water stress we suffer, for your inability to react on time and for all thermal, radioactive, chemical, organic, hydrocarbon, and polychlorinated pollution you have caused in water. All environmental threats we face at the end of the 21st century are the syndrome of a cultural and spiritual disease guided by a neoliberal ideology, whose pathological symptoms are observed in the social exclusion of the poorest with water privatization since the early 1980s, especially in the West. How could you call the current state of ecocide and genocide that ends life on Earth and excludes the poorest “progress”?

The main intention of this letter is to get the ownership, management, distribution, and political control of the water to be public. Water is a common good of humanity, and therefore **water is a universal human right**. In this sense, the Summit of the United Nations General Assembly in September 2015 in New York, where

Sustainable Development Goals (SDGs) shall be adopted, represents a unique opportunity to create a global water authority to establish universal standards for sustainable use. Following the sixth goal of the SDGs for 2030, which seeks to ensure available and sustainable water management, the creation of a **World Water Tribunal** aims to control, evaluate, monitor, and implement water policies at the local, regional, and national scale. **The SDGs are a challenge of global governance that need planetary consensus** and this requires that all people become aware of the political and economic illusion of unlimited growth. The year 2015 is a turning point to address the geopolitical and geostrategic water challenge. Avoiding conflicts that have occurred in the middle of the twenty-first century requires overcoming the anthropocentric view imposed on diverse common natural goods, which reduce them to *commercial, economic goods*. The absurd irrationality of social and economic systems that despise the living community for the profit of a minority human elite, converting all source of life into market products, has forced us to migrate to distant planets to safeguard human survival. Lost in the middle of the universe, we cry for the millions of living species that we had to leave in the terrestrial biosphere, having failed to react in time to achieve a sustainable development.

The year 2015 is a most paradigmatic crossroad for humanity to decide on the maintenance of life in the future. **Water is the critical element for the proliferation of life on Earth**, a small planet that gravitates around a peripheral sun of the Milky Way. Water is the most important natural resource and the “mother” of the cells of all living organisms that emerged 3.8 billion years ago. It is a scarce and limited common good on the global and local scale that has allowed the birth and evolution of many human civilizations in nearly all corners of the Mother Earth. The *Big History* shows that civilizations flourished in favorable areas for agriculture and trade, such as river basins and coastal areas. In addition, the purifier aspect of water is a transcultural element with rites in most religions, such as Christianity, Hinduism, Islam, Taoism, Judaism, Shinto, and the Rastafari movement, among other religions. Water is the transpolitical meeting point of the **emerging global citizenship of Earth-Homeland** and you have in your hands the future of life, because they are dependent on water to continue their evolution. The year 2015 is the last chance to prevent the collapse of an interdependent planetary civilization and you must continue to **join hands** to overcome the spiritual poverty that afflicts and hampers you to feel spiritually the rich ecological biodiversity of life in nature. You must act now!

Javier Collado Ruano

Director of Edition

Cartas desde el futuro para la generación del año 2015: el agua y el desarrollo sostenible

Hoy, 22 de marzo del año 2093, la Confederación de los Pueblos de la Tierra celebramos el primer centenario del **Día Mundial del Agua**, adoptado por la Asamblea General de las Naciones Unidas el 22 de diciembre de 1992. Creemos haber descubierto el modo de distorsionar el espacio-tiempo para hacer llegar la presente carta a la generación de 2015, donde la humanidad entera se enfrenta al reto de alcanzar las metas de los **Objetivos de Desarrollo Sostenible**. Se trata de una carta dirigida a fomentar una reflexión transnacional que consiga gestionar eficazmente las políticas futuras del agua, especialmente para las tres dimensiones del desarrollo sostenible: social, económica y ambiental. Albergamos la esperanza de sensibilizar a la opinión pública y hacer reaccionar a la **ciudadanía mundial** del año 2015 para participar, sobre bases representativas y directas, en la construcción de una política del agua a nivel local, nacional e internacional. Un movimiento de participación ciudadana cuyo enfoque transdisciplinar capte las interconexiones entre la alimentación, la salud, la energía, el comercio, el medio ambiente y el agua.

El Decenio Internacional para la Acción: “El agua, fuente de vida 2005-2015” supuso un intento de garantizar la disponibilidad y la gestión sostenible del agua. Pero vosotros, nuestros bisabuelos, abuelos y padres, hicisteis caso omiso de las múltiples recomendaciones que los expertos ecologistas de todo el mundo advertían desde Estocolmo en 1972, el Club de Roma en 1973, la comisión Brundtland y el informe *Nuestro futuro común* de 1987, la Cumbre de la Tierra de 1992, el Programa de Acción de Barbados de 1994, la Cumbre sobre Desarrollo Social de Copenhague de 1995, el protocolo de Kyoto de 1997, la Declaración del Milenio con la aprobación de los **Objetivos de Desarrollo del Milenio** en 2000, Johannesburg 2002, o Río+20 en 2012, entre otros muchos. Hoy lloramos por vuestra irresponsabilidad para preservar la vida y alcanzar un desarrollo sostenible. Lloramos porque nos habéis fallado con vuestros hábitos de consumo irracional de explotación y agotamiento de los recursos naturales. Lloramos por el estrés hídrico que soportamos por vuestra incapacidad para reaccionar a tiempo y por toda la contaminación térmica, radioactiva, química, orgánica, por hidrocarburos y por policlorobifenilos que habéis causado en el agua. Todas las amenazas medioambientales a las que nos enfrentamos a finales del siglo XXI son indicios de una enfermedad cultural y espiritual guiada por una ideología neoliberal, cuyos síntomas patológicos se observan en la exclusión social de los más pobres con la privatización del agua desde la década de 1980, especialmente en Occidente. ¿Cómo pueden llamar “progreso” al flagrante estado de ecocidio y genocidio que acaba con la vida en la Tierra y excluye a los más pobres?

El principal objetivo de esta carta es conseguir que la propiedad, la gestión, la distribución y el control político del agua vuelva a ser público. El agua es un bien común de la humanidad, y por tanto, **el agua es un derecho humano universal**. En este sentido, la cumbre de la Asamblea General de las Naciones Unidas de

septiembre de 2015 en New York, donde se aprobarán los Objetivos de Desarrollo Sostenible (ODS), representa una oportunidad innata para crear una autoridad mundial del agua que establezca normas universales para su utilización sostenible. Siguiendo el sexto objetivo de los ODS para 2030, que persigue garantizar la disponibilidad y la gestión sostenible del agua, la creación de un **Tribunal Mundial del Agua** constituiría un dispositivo de control, evaluación y seguimiento para implementar las políticas del agua a escala local, regional y nacional. **Los ODS constituyen un reto de gobernabilidad mundial que requiere un consenso planetario** y para ello es necesario que todos los pueblos tomen conciencia de la ilusión político-económica de un crecimiento sin límites. El año 2015 constituye un punto de inflexión para hacer frente al desafío geopolítico y geoestratégico del agua. Evitar los conflictos bélicos que han ocurrido a mitad del siglo XXI requiere superar la visión antropocéntrica impuesta a los diversos bienes naturales comunes, que los reduce a *bienes económicos mercantiles*. La absurda irracionalidad del sistema social y económico que despreció a la comunidad de seres vivos por el afán de lucro de una élite humana minoritaria, convirtiendo toda fuente de vida en productos de mercado, nos ha obligado a migrar a planetas lejanos para salvaguardar la supervivencia humana. Perdidos en mitad del universo lloramos por las millones de especies vivas que tuvimos que abandonar en la biosfera terrestre por no haber sabido reaccionar a tiempo para alcanzar un desarrollo sostenible.

El año 2015 es la mayor encrucijada paradigmática de la humanidad para decidir sobre la manutención de la vida en el futuro. **El agua es el elemento crítico para la proliferación de la vida en la Tierra**, un pequeño planeta que gravita en torno a un sol periférico de la Vía Láctea. El agua es el recurso natural más importante y la “madre” de las células de todos los organismos vivos surgidos hace 3.800 millones de años. Se trata de un bien común escaso y limitado a escala local y global que ha permitido el nacimiento y la evolución de numerosas civilizaciones humanas por casi todos los rincones de la Madre Tierra. La *Gran Historia* muestra que las civilizaciones florecieron en zonas favorables a la agricultura y al comercio, como la cuenca de los ríos y las zonas costeras. Además, el aspecto purificador del agua es un elemento transcultural con ritos en la mayoría de las religiones, como el cristianismo, el hinduismo, el islam, el taoísmo, el judaísmo, el sintoísmo, o el movimiento rastafari, entre otros. El agua es el punto de encuentro transpolítico de la **emergente ciudadanía mundial de la Tierra-Patria** y ustedes tienen en sus manos el futuro de la vida, porque ésta depende del agua para continuar su evolución. El año 2015 es la última oportunidad para evitar el colapso de una civilización planetaria interdependiente y deben permanecer de **manos unidas** para superar la pobreza espiritual que les aflige y les impide sentir espiritualmente la rica biodiversidad ecológica de la vida en la naturaleza. ¡Deben actuar ahora!

Javier Collado Ruano

Director de Edición



Prof. Dr. Luciano Espinosa Rubio

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REFLEXIONES SOBRE EL AGUA: UN ESPEJO DE NUESTRO TIEMPO

1. Un planteamiento multidimensional

Desde diversos ángulos, bien puede decirse que *somos* agua y que eso lo incluye casi todo. Pocas presencias son tan importantes y básicas, pero por ser algo tan obvio y cotidiano tiende a olvidarse por parte de aquellos que no la echan en falta, e incluso para éstos es algo dado por supuesto sin comprender a fondo sus innumerables implicaciones. Lo cierto es que atañe a todos los registros de la vida humana (y del resto de vidas) con una fuerza inaudita, hasta el punto de convertirse en cierto modo en su *espejo*, con las connotaciones simbólicas de esta metáfora: el espejo capta lo que sucede y fluye (como el propio agua), refleja todas las cosas, es el continente receptivo y siempre adaptado al contenido; muestra, en fin, el movimiento del universo, que es justamente la tarea propia del pensamiento (de ahí la asociación de éste a la simbología del espejo)¹. Luego el carácter especular y metafórico del agua se suma a su peso empírico y proporciona así una buena perspectiva para observar nuestro presente histórico, del que lo menos que puede decirse es que sufre una crisis de fundamentos de la que ya nadie puede dudar. En la mente de todos están los complejos aspectos sociales, ecológicos, económicos, geopolíticos, etc. del caso, pero hay que recordar el sencillo hilo conductor que los une, al menos como primera divisa: la confusión absoluta entre valor y precio. No hace falta insistir en ello, buena parte de la civilización gira en torno a semejante aserto, o, si se prefiere, a la variante del mismo que da la razón al viejo dicho marxiano de que del valor de cambio aplasta al valor de uso. Y ambos puntos repercuten de lleno, claro está, en todo lo referente al agua. Para rematar esta aproximación de tonos alegóricos, nada mejor que concluir con la imagen del hombre como Narciso reflejándose en el espejo acuático, inconsciente del peligro mortal que le acecha por su egolatría y negligencia.

Ahora bien, conviene no confundir los términos lógicos del grave problema que padecemos, y para la intención de este escrito basta con remitirse a un juicio que parece certero: la profunda impotencia política y cultural que nos aqueja no es el efecto sino la causa

del desastre financiero y demás estafas consentidas, y en general de que haya tantas estructuras podridas que perpetúan el estado de cosas. Además, ahí convergen otras dimensiones como la falta de gobernanza global y, lo que es peor, la profunda desconfianza hacia la política, así como una gran *policrisis* con facetas climáticas, alimentarias, energéticas... De modo que la desigualdad creciente, la ausencia de un discurso público que no sea únicamente tecnocrático y/o demagógico, el fracaso de la supuesta autorregulación capitalista o el desarraigo de la experiencia vital producido por la globalización... no deben achacarse a una mera coyuntura². La ceguera es previa e interesada, por supuesto, y la parálisis de la conciencia crítica en la sociedad occidental resulta incontestable, entre otras cosas porque los *sobornos* en forma de bienes de consumo crecientes son muy poderosos y van sostenidos por eficientes campañas de publicidad y desinformación, junto al perenne refuerzo del miedo (paro, terrorismo, etc.). Es decir, el discurso más o menos unidimensional y acomodaticio se impone entre los afortunados del planeta no sólo por la vía de hecho sino también *de derecho*, de ahí la soberbia recuperada por parte de los neoliberales y demás ralea. Una mayoría harto asustada ya no se hace preguntas, a pesar de que los conflictos son patentes para quien quiera verlos.

Muchos saben que viven sobre la base de una gigantesca mentira y no menor injusticia, ese barril de pólvora antes llamado *crecimiento ilimitado* cuyo eje es la explotación correlativa del hombre y de la naturaleza, y ahora púdicamente reconvertido en *sostenible*, como si este cuento fuera de recibo o siquiera eficaz en la solución del peligro que nos acecha a estas alturas (lo pudo ser hace décadas). La pregunta obvia es qué hacer, cómo encauzar una acción transformadora a gran escala si no hay lucidez ni voluntad suficientes, y entonces el intelectual está tentado de plantear la venerable cuestión de una *medicina mentis* o educación del pensamiento en su raíz, pero eso no basta y tampoco hay tiempo, lo sabemos, por más deseable que pudiera resultar. Lo único seguro es que carecemos de respuesta satisfactoria (la ilustración ha mostrado sus límites en todo sentido), cuando la cosa urge cada día más. Por decirlo de otra forma, el mundo no es legible³ y mucho menos previsible, ya no cabe el sueño de descifrar una escritura inexistente en el ser y menos gobernar la historia hacia el progreso seguro, así que estamos particularmente confusos y bloqueados... O tal vez escondamos la cabeza debajo del ala y disociemos la conciencia para no sufrir⁴. Sea como fuere, es obligado ensayar una cierta actitud intelectual a la vez beligerante y constructiva, por más difícil que resulte en la teoría y en la praxis, pues si no hay nada dado *a priori* en las cosas mismas, al menos habrá que narrarlas *a posteriori* de modo distinto al de costumbre. Y es que tan pernicioso es el triunfalismo como el lamento fatalista.

Salta a la vista la trascendencia que para la bioética y la biopolítica tiene la cuestión del agua, por lo mismo que resulta patente su tremenda repercusión en la vida diaria, en la esfera ambiental, política, económica y cultural. O no tanto... Por eso vamos a ocuparnos de estas dimensiones y de otras simbólicas, de algunas de carácter estratégico y, en fin, de lo que podríamos resumir como estilos de vida ligados a formas de justicia e injusticia, pues todo ello

aparece más integrado ahora que nunca antes en la historia, aunque siempre hayan ido de la mano⁵. Podrían resumirse las actitudes fundamentales respecto al agua en dos puntos: a) hace tiempo que se la ha llamado “oro azul”, como denuncia de su galopante mercantilización a la par que muestra de su extraordinario valor, y b) necesitamos un pacto global que recoja sus aspectos fundamentales para evitar daños mayores y sufrimientos incalculables⁶. Es indecente y suicida infravalorar la gravedad de una situación que empeora por momentos, aunque los ignorantes y los hipócritas que defienden el *statu quo* tachan de alarmista cualquier llamada a tomar medidas drásticas cuanto antes y así paliar en algo el descalabro.

2. Algunos significados del agua

Recordemos brevemente -mediante su carga semántica y práctica- la presencia intensa del agua en la vida humana, pues hace falta explicitarlo para luego plantear la necesidad de nuevas relaciones entre ámbitos que siempre han sido y serán esenciales:

2.1 En sentido físico y químico, sólo dos apuntes de distinto signo, el primero extensional y el segundo intensional: el agua ocupa la gran mayoría de la superficie del planeta, como es sabido, pero sólo un 2,5 % es dulce, y de ella apenas un 0,4 % está disponible (y disminuyendo), por lo que no abunda como podría parecer a primera vista a ciertos conformistas; y, por otro lado, su propia naturaleza es una de esas *emergencias* fundamentales (o saltos cualitativos por composición) que podemos hallar en el universo, pues ni el oxígeno ni el hidrógeno presentan por separado las características que su combinación depara, lo que nos habla de uno de esos fenómenos sorprendentes que desafian cualquier enfoque reduccionista.

2.2 En sentido biológico, a nadie se le escapa que ha jugado y juega un papel decisivo en la génesis, subsistencia y organización de ese milagro termodinámico que llamamos vida, de modo que sin hidratación suficiente ésta es inconcebible. Recordemos que sin agua no hay fotosíntesis, o que los mamíferos se gestan en un medio líquido y los ovíparos vienen al mundo en una cápsula nutritiva semejante; a lo que debemos añadir datos concretos de los humanos, como que el 70 % del organismo está constituido por agua en términos materiales (protoplasma celular, sangre, linfa...), porcentaje que llega al 85 % en el caso del cerebro y su intrincadísima red de conexiones, lo que habla de la dependencia total de nuestra entraña física y mental respecto a ella (por ejemplo como vehículo de transmisión electroquímica). Baste decir que una simple deshidratación del 2% puede ocasionar mareos, falta de concentración y de memoria...; o que muchas dolencias guardan relación con un déficit de agua donde corresponda. Casi podría concluirse que quien no bebe lo suficiente no puede ser humano en plenitud o al menos queda seriamente disminuido. De ahí que cualquier consideración sobre su escasez y falta de acceso tenga consecuencias éticas, antropológicas y sociales de primer rango.

2.3 En un terreno social y práctico más heterogéneo, se impone la relación con la agricultura y la ganadería (base de la alimentación humana: hay unos 240 millones de

hectáreas de regadío en el planeta, de donde proviene el 40% de la comida), así como con la energía (no sólo hidráulica, como veremos) y la economía por motivos no menos evidentes, pero también con la higiene y la salud, el ocio y el disfrute, el transporte y el comercio, etc. Digamos sencillamente que aspectos capitales de la vida pública y de la privada dependen del líquido elemento de forma decisiva, hasta el extremo de que el llamado desarrollo de los pueblos y la autorrealización individual siempre le han sido deudores por múltiples vías directas e indirectas. Luego no cabe hablar de las sociedades (ni de las personas) como organizaciones complejas sin ese protagonismo, también en aspectos que trascienden lo biológico hacia nuevos niveles pragmáticos y simbólicos.

2.4 La espiritualidad de todo tiempo y lugar ha prestado inmensa atención al agua, al menos desde el Neolítico, reconociéndola como fuerza y poder originario, elixir de la inmortalidad y principio curativo, sede de la vida, palanca de regeneración y purificación, puerta de acceso a lo sagrado...; de ahí que se le haya rendido culto de múltiples maneras, además de usarla como elemento clave en cualquier rito o sacrificio, etc. Que el agua aparece a menudo como fuente y sustrato del universo, queda resumido en estas palabras: “En la cosmogonía, en el mito, en el ritual, en la iconografía... las aguas desempeñan siempre la misma función, cualquiera que sea la estructura de los conjuntos culturales de que forme parte: *preceden* a todas las formas y son *soporte* de todo lo creado”⁷. Se trata de algo así como la matriz del ser y de sus posibilidades, nada menos, el fundamento primigenio de toda manifestación óntica y existencial, así como el sostén en el tiempo que incluye la capacidad de renovarse sin cesar. Recuérdese también la experiencia humilde y más cercana del baño que limpia, repara y descansa.

2.5 El sentido específicamente filosófico está muy ligado a lo anterior, claro está, según muestra la frecuente inclusión del agua en las antiguas teorías sobre los *últimos elementos* del Cosmos, sea en Oriente u Occidente, en calidad de cómplice de los demás (fuego, tierra, aire, o madera en China) con los que forma ciclos basados en alternancias, según relaciones que los convierten en complementarios y antagónicos, siempre orientadas a entender el dinamismo y la pluralidad del conjunto. Podría mentirse a los Presocráticos, en particular a Tales de Mileto, pero también la singular expresividad del agua para abordar el problema perenne del cambio y la permanencia (Heráclito), o como figura paradigmática del curso natural -espontáneo, fácil, flexible- de las cosas (así en el Daoísmo); o ser tomada como una de las imágenes predilectas en diversos registros de la cultura para referirse a la belleza, la armonía, la profundidad o el misterio de lo real, sin olvidar su papel en toda clase de fenómenos sapienciales, estéticos, literarios y folklóricos.

Sin duda caben otras vertientes, pero estas cinco nos parecen la base del resto y ofrecen un muestrario muy elocuente del asunto que nos ocupa⁸. Ya se ve que la frase inicial de que *somos* agua tiene aquí su corroboración, aparte de incluir multitud de consecuencias existenciales y prácticas, así como otras más o menos *intangibles*. Quiero decir que el ser humano se alimenta tanto de realidades materiales como de *irrealidades* simbólicas, y el agua

es una de las pocas cosas que tienen un peso específico en ambos planos. Por eso es pertinente preguntar si el discurrir de la historia no la ha subordinado a lo meramente utilitario, o al menos si no se han hipertrofiado algunas de las dimensiones enunciadas en detrimento de otras. Digamos que se han roto, como en otros campos, algunos equilibrios sutiles en nuestra relación mental con ella (y por extensión con la naturaleza en su conjunto), algo que antes o después se nota en las actividades de toda índole. El resultado mediato es el abuso ejercido en un consumo derrochador, unido al crecimiento imparable de la demanda -se calcula que ya hay un déficit del 20% respecto a lo que sería necesario y que en 15 años subirá al 50%-, a lo que se añade la amenaza cierta del cambio climático -un aumento de 2º supondría un 25% menos de agua dulce en el planeta-, todo lo cual ha puesto al agua de nuevo en el primer plano de la supervivencia. Vaya por delante que no pretendemos hallar solución en un *reencantamiento* del mundo que revalorice el agua en términos parecidos a las posiciones de la *ecología profunda*, como tampoco basta la mera divulgación bienintencionada de los datos, sino que importa hacer una reflexión amplia sobre la riqueza de ámbitos que guarda el tema con sus muchas interacciones internas.

3. Una pintura al agua del presente

Es imprescindible conocer antes que nada algunos datos⁹ básicos, primero referidos a los países *ricos* y después a los *pobres* (la simplificación de estos adjetivos no carece de validez, desgraciadamente), para entender mejor la desigualdad y la injusticia que rodean al agua bajo otro punto de vista. Sirve esto además para tomar plena conciencia de los riesgos que acechan a la humanidad, ante los que a menudo se responde con negligencia e ineptitud, amén de apuntar las implicaciones transversales que ya asoman en el horizonte, sean de tipo geopolítico, militar y de seguridad, energético y económico, ecológico y en definitiva existencial.

3.1 En el llamado Primer Mundo se consumen ingentes cantidades de agua, como en todo, de manera que un 12% de la población acapara el 85% del total. Ni siquiera impera la célebre proporción del 20/80 que suele aplicarse a la riqueza o a la contaminación: un 20% de los humanos posee el 80% de los bienes y contamina en el mismo porcentaje. Es interesante advertir, para ilustrarlo, que si la ONU recomienda un uso de unos 100 litros/persona/día (que incluye todos los insumos directos e indirectos), en USA el consumo es de 380, en un país medio como España es de 154 y en uno pobre se utilizan unos 19 de promedio. La desproporción es abrumadora y no requiere comentarios, salvo que ello no obedece sólo a las diferentes condiciones geográficas y climáticas ni al mero retraso en la explotación de los recursos. Al contrario, se da la paradoja, por ejemplo, de que Europa importa billones de litros al año de lo que se llama *agua virtual*¹⁰, y Japón, que es el caso extremo, recibe hasta 15 veces más de la que exporta. Algo que se explica porque unos envían productos agropecuarios (cereales, café, soja, carne de vacuno, algodón...) que necesitan gran cantidad de agua y otros

venden los tecnológicos o manufacturados, de modo que América del Sur y África son exportadores netos del líquido por este concepto. Es decir, el mayor gasto se realiza en los lugares donde se generan los productos del sector primario que luego compran los importadores, todo ello sometido por cierto a leyes de comercio y arancelarias más que asimétricas (aunque ése es otro tema), asunto que obviamente deja un beneficio neto -hídrico y de otros tipos- a los más ricos, con independencia del pago hecho por la compra de aquellos bienes. Huelga decir que estos temas, por otra parte, deberían tenerse en cuenta al tratar la deuda financiera de los países pobres y la llamada deuda ecológica de los desarrollados con ellos.

En lo que hay cierta semejanza a nivel planetario es en los porcentajes generales de uso del agua por sectores: más del 70% se dedica a la agricultura, algo menos del 25% a la industria y no llega al 10% la destinada al consumo doméstico. Es verdad que las distintas actividades marcan el grado de las necesidades, pero no parece de recibo que el consumo humano básico quede en muchos casos postergado en aras de la producción económica y sus desequilibrios (monocultivos, erosión genética que se traduce en menos variedades, falta de infraestructuras adecuadas de canalización...), recientemente incrementados con la fiebre de los agrocombustibles¹¹. Por otro lado, habría que hacer mención especial de los fines que bien podrían llamarse suntuarios, como son los 7800 millones de litros/día que absorben los campos de golf en USA, por dar un botón de muestra revelador. En cualquier caso, volvamos al gasto de agua virtual por unidad de producción, de la mano de Hoekstra y colaboradores -creadores del término “huella hídrica”-, en el bien entendido de que se incluyen todos los aspectos (riego, elaboración, limpieza, transporte, etc.) y que se trata de ejemplos paradigmáticos: 1 kg de vacuno requiere unos 15.500 litros, uno de embutido unos 11.500, una hamburguesa alrededor de 2400, un kilo de arroz unos 3400, un café unos 140, un yogur cerca de 1150, unos pantalones vaqueros alrededor de 11.000, una camiseta de algodón 2900..., y producir un kg. de aluminio consume unos 100.000 litros. Por asombroso que resulte, para terminar, hay que decir que una vaca consume directa e indirectamente (riego de pastos, estabulación, etc.) más de 3 millones de litros a lo largo de su vida¹². Más allá de lo chocante que parezca, se trata de métodos de análisis contrastados, análogos a la más conocida *huella ecológica*; el problema es que hay cosas que no caben en el PIB o simplemente que no se quieren ver.

3.2 El panorama socio-económico en los países del Tercer Mundo es muy distinto, empezando por una esperanza de vida mucho menor, entre otras cosas porque guarda relación directa con la carencia e insalubridad del agua. Aunque no se deban acumular cifras sin más, hay algunas que son imprescindibles, siquiera como contraejemplo de la macroeconomía capitalista con la que nos bombardean a diario. Los datos más aceptados indican que unos 900 millones de personas no tienen acceso al agua limpia, que un 46% de los habitantes del planeta no goza de agua corriente y que unos 2500 millones no tienen saneamientos. Por eso

no sorprende tanto que al año haya 10 veces más muertes por infecciones relacionadas con el agua que por guerras, esto es, más de 3 millones de víctimas de las que la mayor parte son niños menores de 5 años. En otras palabras, según la OMS un 80% de las enfermedades y 1/3 de las muertes en los países subdesarrollados tienen que ver con esa contaminación, luego el agua paradójicamente también es sinónimo de muerte en determinadas condiciones. Es imposible callar que, cuando los occidentales estamos tan preocupados por la llamada crisis económica y los rescates masivos a las entidades financieras, etc., en otros lugares viven una tragedia perpetua que a pocos importa, y menos ahora que tenemos *urgencias inaplazables* como el ajuste fiscal que imponen los famosos mercados que antes se han aprovechado del presupuesto público... Lo que repercute en la denominada Ayuda al desarrollo, ya de por sí escasa, además de ocasionar perjuicios financieros, comerciales y de rechazo a la inmigración. Aunque nos queramos ceñir a nuestro tema, salta a la vista su conexión con otros ámbitos y aspectos sociales, como muestra el hecho -en otro orden de cosas- de que el necesario acarreo de agua en gran parte del mundo es una tarea sobre todo femenina, lo que impide la escolarización de muchas niñas y por tanto las condena aún más a seguir dominadas y discriminadas¹³, habida cuenta de que ocupa buena parte de la jornada.

Las dificultades, claro está, no hacen sino aumentar a la vista del cambio climático y sus desajustes crecientes, en particular las sequías y la erosión que golpean mucho más al Sur, lo que desencadenará más penurias y hambrunas con su secuela de conflictos violentos y migraciones generalizadas. Según previsiones razonables, en el año 2025 cerca del 40% de la población mundial padecerá la escasez en diferentes grados, y de manera más concreta se afirma que la zona del Sahel africano perderá hasta un 75% de la tierra arable¹⁴. Es claro que no puede anticiparse cuál será la subida de la temperatura media en la Tierra a lo largo del siglo XXI, pero lo cierto es que hay indicios y motivos de sobra para preocuparse. De momento no se vaya a la raíz de los problemas, sino que los principales esfuerzos se orientan a hacer nuevos negocios (también con el agua) y a levantar muros físicos y jurídicos contra los que abandonan desesperados sus tierras estériles. En otras palabras, ante peligros globales como éste los principales perjudicados son los de siempre y, en general, los más débiles como niños, mujeres y ancianos. No es demagogia, simplemente estamos demasiado acostumbrados a oír la cantinela del dolor ajeno y la frialdad de las cifras. Ahora bien, también se van a producir cambios no lejanos que trastornarán a todos de una u otra forma, siquiera con los grandes movimientos de población que no han hecho más que empezar, una vez que la lucha por sobrevivir se haga aún más acuciante y descarnada.

3.3 Por de pronto, se pueden extraer algunas consecuencias de diversa índole a la hora de valorar la situación actual y sus proyecciones inmediatas: en términos sociales, la gestión del agua es y será clave para la organización colectiva, pondrá a prueba la fuerza y la calidad de las instituciones, y tendrá una influencia preponderante en la posibilidad de desarrollo de los pueblos¹⁵. Quizá el mensaje que lo resume todo es que sin agua no hay posibilidad de

generar oportunidades: eso incluye la pobreza económica, el hecho de que no hay energía física ni mental y tampoco tiempo para crecer como personas, además de la falta de igualdad social y de género, y estos obstáculos bloquean el resto de opciones. En verdad, sin agua apenas hay vida privada o pública digna de ese nombre. Es obvio, en segundo lugar, que tanto ocurre con la vida animal, y aquí el dato más peligroso es la pérdida alarmante de biodiversidad específica, como atestigua el hecho de que la extinción de especies de agua dulce es cinco veces mayor que la producida en biotopos terrestres o marinos. Parece claro que la sobreexplotación y la contaminación van de la mano y son sus causas directas, sin olvidar que un tercio del consumo total de los humanos procede del subsuelo y que el ascenso acelerado de la capa freática impide la regeneración de ríos y lagos. En resumen, el complejo eco-bio-social que habitamos, donde unas variables inciden sin solución de continuidad en otras, presenta señales de alarma que ya no podemos desoir.

Pero el caso es que lo hacemos una y otra vez, obsesionados por la dimensión económica de todo cuanto existe. Así, en tercer lugar, el negocio ligado al agua es uno de los más florecientes: la venta embotellada en 1970 rondaba los 1000 millones de litros, en el año 2000 pasó a 84.000 y en 2009 alcanzó los 598.000 millones de litros¹⁶. No hay un crecimiento equiparable en ninguna otra actividad empresarial, cosa comprensible si tenemos en cuenta que la media mundial supone que la embotellada vale unas 245 veces más que la de uso corriente. De ahí, entre otros motivos, que aumente la presión privatizadora, sea a través de la compra masiva de reservas de agua dulce, de la gestión mercantil del abastecimiento prestado a los ciudadanos o de la concentración oligopólica de tan jugosos negocios¹⁷. Es evidente que hay mucho dinero en juego y que la tendencia es que crezca el envite, sobre todo a los ojos del omnímodo capital especulativo (que sale inauditamente fortalecido de la crisis/estafa masiva que él mismo provocó), ante unas expectativas generales de escasez que aumentará la rentabilidad. Lo tremendo es que, ante la falta de ingresos fiscales, las administraciones públicas buscan obtener dinero por la venta de esas infraestructuras y servicios, lo que pone a los ciudadanos a los pies de los caballos. La supuesta eficacia y el mitificado ahorro por parte de la gestión privada se convierten en realidad en un aumento medio de los precios del agua de un 15% anual, según estudios realizados en USA sobre el período 1991-2010, por lo que muchas ciudades están intentando recuperar por medios legales lo que nunca debieron perder¹⁸, siguiendo el ejemplo ya célebre de Cochabamba en Bolivia. Y es que nunca es tarde si la protesta popular cargada de razón llega.

El cuarto tipo de consecuencias e implicaciones se refiere al terreno energético en particular, una vez conocido que habrá problemas con el abastecimiento de petróleo a medio plazo y es ya un tópico referirse a las *renovables* como salvadoras, también del efecto invernadero. Sin embargo, dejando de lado otras dudas sobre este diagnóstico, en lo que se refiere al agua lo primero que debe hacerse es evitar las pérdidas en su conducción (alrededor del 40-50% según los casos) y reciclarla cuanto sea posible. Tampoco estaría mal reducir al

mínimo los perjuicios humanos y ecológicos de bastantes obras hidráulicas (represas¹⁹, etc.), pero como ahora no pueden tratarse todos los asuntos concernidos, digamos que sería muy conveniente atender a las relaciones del agua con diversas fuentes de energía convencionales y alternativas: partiendo del hecho de que el 22% del agua captada se usa en España para refrigerar grandes centrales productoras de electricidad y de que el 10% del consumo de esta última está ligada al agua de algún modo, los especialistas plantean la exigencia de agua abundante para hacer viable un hipotético parque generalizado de coches eléctricos, así como para garantizar su presencia fundamental en la fijación del hidrógeno que algún día podría explotarse y en la generación de energía solar ya en marcha²⁰. Todo ello será imposible sin la adecuada planificación a largo plazo, lo que obliga a practicar ahorros suplementarios y a promover cuantas sinergias sean posibles, sin tener la seguridad ni mucho menos de que baste con eso para resolver la escasez de recursos y el trastorno climático. Por lo demás, aquí como en otros asuntos, sería iluso pensar que una milagrosa revolución tecnológica solucionará los problemas por sí sola, sin requerir profundas transformaciones sociales y de mentalidad. Digamos únicamente, por dar unas pinceladas, que el transporte automovilístico masivo es inviable consuma la energía que consume, que la desalinización a gran escala no es inocua en términos ecológicos ni rentable... y que nunca existirá agua “digitalizada”, aunque a menudo nos comportemos como si la *resistencia* física de lo real desapareciera ante nuestra soberbia pretensión de convertirlo todo en algo *virtual* para manejarlo a capricho²¹.

Por último, en quinto lugar, es obligado asomarse a los *problemas de seguridad* ligados al caso, pero hacerlo dentro de un marco amplio²². La pugna por el control del agua es un tema muy delicado, como bien sabemos en España con los trasvases y las competencias en conflicto de los diferentes Estatutos de autonomía. Obviamente, los problemas se multiplican a escala mundial: por ejemplo, en Oriente Próximo juega un papel capital en la tensión entre Israel y sus vecinos árabes (pugna por las reservas de los Altos del Golán que no devuelve a Siria, por el control del río Jordán, o la asfixia también hídrica a los palestinos, etc.), al igual que en las fricciones entre Turquía e Irak a cuenta de las represas en el curso alto del Tigris y el Eufrates. A lo que se añade, en otro sentido, la gravedad del cambio climático que empieza a fundir los grandes glaciares del planeta: científicos chinos, por ejemplo, han dado la alarma respecto a los de la meseta de Tibet -incluido el Himalaya- que alimenta los grandes ríos del Sureste Asiático, del Ganges al Mekong, donde vive un tercio de la población mundial²³. Sin olvidar que el deshielo afectará a las rutas comerciales (el Estrecho de Bering tendrá más importancia que los canales de Suez y Panamá), lo que modificará alianzas e intereses, y que en otro orden de cosas obligará a redefinir fronteras (entre ellas la muy sensible de India y Pakistán, potencias nucleares), además del hecho de que las gigantescas migraciones que se prevén por este tipo de causas resultarán inevitablemente desestabilizadoras. En resumen, los desastres ecológicos complican aún más los conflictos previos y añaden otros de nuevo cuño.

Como se ve, y esto sólo es una muestra, se avecinan importantes cambios geopolíticos, con una seria amenaza de violencia a nivel micro y macroscópico, lo que a la postre hace temer mayores enfrentamientos (informales o no, internos y externos). Es imposible desatender, entre otras, la reciente evidencia de lo ocurrido en Darfur (Sudán), donde la falta de agua fue crucial para desencadenar la guerra; o las previsibles peleas por el futuro control de los grandes acuíferos subterráneos del planeta (el de Nubia y el del Sáhara, el Guarani en Sudamérica...). Desde otro ángulo, si vamos a zonas más afortunadas, sabemos que las sequías sufridas en Europa en los últimos 30 años supusieron numerosas muertes y más de 100 mil millones de euros en pérdidas²⁴, lo cual no es más que un aviso de lo que puede pasar. Cabe concluir, en fin, que la humanidad arriba a un período de grandes convulsiones, dicho sin necesidad de ponerse catastrofistas, pues los peligros son reales y sus mecanismos ya están operando hace tiempo, entre los que destacamos: un sistema basado en la explotación generalizada y en el crecimiento ilimitado no puede ser simétrico ni equitativo nunca, pero menos cuando se agota el modelo; la violencia es un artefacto social y estratégico omnipresente en la historia, incluidos genocidios y limpiezas étnicas recientes; los mal llamados desastres naturales a menudo tienen causa antropogénica, como se ve en el clima; la lucha por recursos escasos suele emparejarse con la radicalización social y la xenofobia; el pasado ofrece un buen catálogo de colapsos civilizatorios por causas ecológicas; los aspectos ecosociales de la cuestión contribuyen a generar formas de vida y económicas directamente ligadas a la violencia...²⁵

Este cruce de factores converge hoy día de modo explosivo, lo que en relación a nuestro tema desemboca en problemas con el agua y disputas por el aprovechamiento de la tierra y la contaminación del suelo, una vez dado un marco de injusticia, pobreza y desintegraciones políticas (los estados fallidos), de conflictos avivados en ocasiones por motivos étnicos, migraciones, intereses económicos internos y externos (tráficos varios, legales e ilegales), etc. Si esto parece un tanto teórico, hay que decir que ya se han producido más de ochenta conflictos ambientales en las últimas décadas²⁶ e insistir en que no estamos hablando de meras conjeturas, sino de procesos geo-bio-físicos ineluctables puestos en marcha y de conductas humanas harto repetidas. Es obvio que los países del Norte están en mejor situación para afrontarlo, pero a la larga se verán muy afectados también por ese cúmulo de aspectos entrelazados. Luego el retrato de la situación no es nada halagüeño y si la crudeza realista que preferimos le da un tono pesimista, peor para todos. Lo que no puede hacerse es mantener el engaño en forma de parches, dilaciones o paños calientes que disimulan las cosas, en aras de ser *constructivos* en vez de *apocalípticos*. Sólo desde la claridad respecto a las consecuencias prácticas (antes incluso que morales) del tema será posible la movilización ciudadana y política a todos los niveles, dada la importancia absoluta de lo que está en juego. Por otro lado, no parece inteligente plantearse la cuestión en términos de todo o nada, sino hacer de los grados y de la dignidad de la lucha misma el motor de la

acción. Lo irónico es que -a día de hoy- sería posible abastecer con agua potable a todas las personas que lo necesitan por el equivalente a lo que costaron los primeros meses de la invasión de Irak o el precio de 18 submarinos nucleares...

4. Algunas facetas bioéticas y biopolíticas

Apenas hace falta repetir que con el agua están concernidos los derechos fundamentales de la persona (incluidos los llamados derechos humanos de 1^a, 2^a y 3^a generación), toda vez que es *condición de posibilidad* directa de la vida y la salud, e indirecta de la libertad y la educación, amén de su peso en la calidad de los niveles económico-sociales, ambientales, de género, etc., según se ha visto. Todo ello queda reforzado en el presente por factores nuevos como el cambio climático, los cambios geopolíticos y estratégicos..., sin menospreciar el valor perenne de su simbolismo para el equilibrio mental de la especie, íntimamente unido al agua desde el proceso de hominización y en muchas creaciones culturales y espirituales de todo tipo. El agua, en fin, es uno de esos pocos temas que tiene carácter integral e integrador, y de los que apelan directamente a la reflexión ético-política para exigir un cambio profundo de actitudes y conductas.

4.1 Desde un punto de vista normativo, es oportuno subrayar el reconocimiento por parte de la Asamblea General de la ONU (sesión del 28-7-2010) del *derecho* universal al agua y al saneamiento, lo que va más allá de considerarlo una *necesidad*, como ocurría antes (Declaración de La Haya del año 2000), y no digamos respecto a su consideración como mercancía. Quiere decirse que está puesta la base para crear una legislación internacional más ambiciosa en defensa de todo lo que tiene que ver con el acceso, uso, usufructo, preservación y distribución del agua como bien público y universal, así como con las implicaciones de la llamada *securitización* del mismo. Contra la privatización mercantil y/o estratégica, es preciso salvaguardar el agua como algo *común* y esencial para vivir con dignidad, además de la obligación de transmitirlo en las mejores condiciones posibles a las generaciones futuras. Por eso, a la vista de los datos que proporcionan los informes trianuales realizados por los organismos de la ONU²⁷, resulta ineludible instaurar una gran *Hidropolítica* a nivel mundial que tenga en cuenta todos los factores, de acuerdo a las diferentes escalas temporales y espaciales, aunque ahora ese proyecto parezca remoto. Es demasiado lo que nos jugamos los habitantes humanos y no humanos del planeta, dada la creciente integración de los aspectos naturales y antropológicos en la frágil nave en la que todos viajamos. Quizá por eso se habla de la necesidad de sellar una suerte de nuevo Contrato Social del Agua que refuerce y legitime cualquier paso en esa dirección, ante los tiempos difíciles que se avecinan en muchos ámbitos²⁸. Sin duda que ahora suena ingenuo plantear cualquier gran reforma, después de la burlesca y fracasada “refundación” del capitalismo que se propuso algún tiempo atrás, pero no por eso es menos cierto que hacen falta cambios de fondo en nuestra civilización. Habrá

que aprenderlo de grado o por fuerza y más vale pronto que tarde...Lo malo es que muchas vidas se quedan en el camino.

Desde otro ángulo, debemos partir de una toma de conciencia radical, no retórica, de la auto-hetero-dependencia que ha enseñado el discurso ecológico: nadie puede vivir aislado, sin *reconocer* lo externo a él (que no ajeno), pues todos los seres vivos están constituidos por relaciones múltiples en distintos planos. Somos agua en un sentido sustantivo, decíamos, y por razones análogas a las que hemos ido desgranando se puede añadir que estamos constituidos por nexos (físico-biológicos, afectivos, simbólicos...) con cuanto nos circunda y atraviesa. Tal es el núcleo de un pensamiento que esté a la altura de los tiempos, donde esa interdependencia factual debe recogerse y explicitarse en los planos éticos, jurídicos y políticos. Y lo que es más, la salvaguarda y extensión de la autonomía personal -el gran legado ilustrado- necesita que se den tales pasos cuanto antes, porque ella misma se alimenta (en sentido literal y figurado) de esos elementos externos e imprescindibles, lo que debe preservarse más aún frente a los peligros actuales, si es que otorgamos verdaderos contenidos a la dignidad y la justicia²⁹. Lo crucial del caso es que ante las mayores presiones medioambientales y políticas que se avecinan, todo lo que no sea avanzar en esa dirección supone un retroceso y una amenaza, dado que ahora lo pragmático a medio plazo (conservacionismo y cambio de modelo) y lo bueno (el respeto a los derechos básicos) se dan la mano con urgencia como en pocas ocasiones anteriores.

Esto significa -respecto a nuestro tema- tomar medidas concretas que rebasen la miopía cortoplacista, por ejemplo ante el tópico de una *sostenibilidad* abstracta e hipócrita (cambiar algo, según Lampedusa, -en este caso tecnológicamente- para que todo siga igual), mientras avanza la mercantilización de la vida, lo que incluye privatizar el agua. También en este punto lo único que importa es promover la libertad de decisión personal bien informada, sin dejarse llevar por los denominados *saberes expertos* y los aprendices de brujo de turno. Y para lograrlo es preciso un ejercicio genuino de democracia política que asegure los cauces de expresión y de acción, cosa que está bastante lejos de alcanzarse hoy, como todos sabemos. Luego es urgente acometer, para éste y otros problemas al fin relacionados, una profunda transformación institucional y eso exige alentar la rebeldía ciudadana antes de que sea tarde por completo. Piénsese en el neodarwinismo social (aún peor que el vigente) que sobrevendrá en un mundo de economía especulativa y con escasez generalizada de recursos primordiales (agua, petróleo, carestía de alimentos, etc.), de lo que ya tenemos bastante más que pistas.

Los riesgos de violencia y, en contrapartida, de formas de control exacerbado por parte de los distintos poderes que traten de dominarla son elevados y van desde el populismo autoritario hasta la amplia gama de los estados de excepción, además de abrirse nuevas vías al crimen organizado que trafica siempre con lo prohibido y florece con el miedo. En cuanto a la amenaza de políticas totalitarias, basta con recordar los precedentes de la Antigüedad que se han dado en llamar *despotismos hidráulicos*, ligados al monopolio del agua: Egipto,

Mesopotamia o China se organizaron como sociedades teocráticas cerradas en torno a las estrategias tecnológicas (canales y riego) y ecológicas (crecidas fluviales y cultivos) que garantizaban la dominación de la sociedad entera. Claro que los abusos son habituales en relación a cualquier recurso y civilización (p. ej. el petróleo en la nuestra), donde siempre se busca si no un monopolio imposible, sí una dependencia perniciosa en el marco de un productivismo ilimitado que conduce antes o después, tras una caída gradual de los rendimientos, al “colapso” ambiental y socio-político³⁰. Como es evidente, según enseña la historia, los ecosistemas se agotan y ponen límite forzoso a los excesos antes o después, lo que hoy debería desembocar -dicho en términos generales- en una constatación de Perogrullo: la *ecosfera* es finita y alterar sus equilibrios básicos resulta peligroso, con el agravante de que la asombrosa creatividad humana no llega nunca tan lejos como su ambición, al parecer insaciable.

4.2 Esta falta imperdonable de lucidez y/o decencia se puede aplicar a todo un modelo que ha sido denominado de la *vida líquida*, lo que es una de las grandes metáforas posibles para resumir esta reflexión sobre el agua en su vertiente negativa. Según la célebre lectura que propone S. Bauman, la liquidez consiste en la sucesión sin fin, en la falta de límite y medida., y eso se traduce en llevar una existencia “precaria y vivida en condiciones de incertidumbre constante”, basada en el inicio y la finalización incessantes de los procesos, lo que establece la norma general de la “desechabilidad” y de una supuesta “destrucción creativa”. En paralelo, se impone un patrón de consumo egocéntrico e infeliz, y finalmente la paradójica autoinmolación del sujeto en el marco de una sociedad obsesionada por la flexibilidad absoluta que dé aún más ventajas a los usos mercantiles que la gobiernan³¹. Se trata, pues, del imperio de la fungibilidad universal de personas y de objetos, del hábito de *quemarlos* sin escrúpulos para alimentar un mecanismo de producción ciego y entrópico, aunque sea de diferentes formas en los países del Norte y en los del Sur. No hay pausa en un mundo crecientemente acelerado que facilite la reflexión, ni apenas red de seguridad (se desmonta el estado de bienestar donde lo hay) que proteja a los que viven en la cuerda floja, sin que sea posible tampoco una genuina autoafirmación personal o colectiva donde todo es efímero e incierto. Por el contrario, los sujetos dóciles son gratificados con un menguante trozo del pastel de algunos bienes y servicios, pasan de ser ciudadanos a meros consumidores, y además deben estar disponibles permanentemente como partes del engranaje productivo que los gobierna, sin rechistar ante la pérdida de anteriores derechos adquiridos. Aquí el agua sirve para simbolizar, en fin, la desintegración de cualquier estructura social y de convivencia, tanto en el terreno privado como en el público, o, si se prefiere, la *liquidación* de la auténtica vida humana en el altar de cierto tipo de progreso...

Sin embargo, en esta búsqueda de inspiración para el pensamiento y la conducta, donde el agua no es sólo objeto pasivo sino también estímulo, podemos acogernos a otra metáfora acuática bien distinta: la que no pone el acento en la mera repetición de los gestos explotadores

que fragmentan la vida, sino en la recursión sin fin, esto es, en el carácter cíclico de los procesos naturales, lo que permite la retroalimentación que organiza formas estables de vida. El agua sirve ahora como modelo de lo que se regenera, sea en los manantiales o en el circuito de evaporación, condensación y lluvia; o en otro plano como fuente de transparencia y belleza. El daoísmo chino hizo una aportación hermosa al respecto, bajo una perspectiva singular, cuando tomó al agua como símbolo de blandura y suavidad que se adapta a todos los terrenos, es decir, como ductilidad que todo lo vence, pues lo que en principio parece sometido, débil e informe acaba por ser irresistible³². Acaso encontramos en esa idea de fuerza tranquila y flexible una guía útil, la actitud sensata e inteligente que nada tiene que ver con el frenesí y la complacencia del consumismo, sino con el paso lento y firme, espontáneo, de lo que fluye por su cauce (sin ejercer violencia mientras esté despejado). De nuevo el agua recuerda aquí lo carente de rigidez, lo que es previo a todo y por eso *virtual*³³, lo que lava por dentro y por fuera nuestra realidad para renovarla y abrir otras posibilidades de ser.

Es curioso, por último, que en un mundo que se dice informacional, lleno de realidades virtuales en expansión, hayamos hablado de *agua virtual* desde otras dos perspectivas: como concepto de medida para la producción y el gasto, así como del simbolismo que le es propio en tanto que condición de posibilidad de todas las cosas. Claro que son tres sentidos diferentes (sumado el tecnológico informacional) que aparecen en tres planos diversos, pero no deja de haber algún vínculo de fondo que emerge a modo de conclusión: el agua es finita y no intercambiable, no se fabrica ni se sustituye por símbolos, y en cambio sí es una pauta fundamental para entender y gobernar nuestra vida en sus variados registros, privados y públicos, hoy y mañana, primero para sobrevivir y después para realizarnos como personas plenas. En una palabra, cuidar el agua, su consumo y su reparto equitativo, es una manera muy fructífera de cuidar a la par los tradicionales valores de la vida y los de la libertad.

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NOTAS Y REFERENCIAS

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- 1 Cf. Cirlot, J. E.: Diccionario de símbolos, Barcelona, Labor, 1988 (7ª ed.), pp. 194 s. No es casualidad que el espejo esté asociado al agua y en general a los símbolos lunares y femeninos.
- 2 Cf. Touraine, A.: “La crisis dentro de la crisis”, El País 26-9-2010. El autor añade que al menos contamos con los discursos alternativos de la ecología política, el feminismo y el respeto a las minorías como contrapesos.
- 3 Según la célebre metáfora que para Hans Blumemberg (La legibilidad del mundo, Barcelona, Paidós, 2000) atraviesa la historia del conocimiento.
- 4 Este análisis psicosocial merecería una reflexión aparte, ya en curso bajo el título de “La percepción social del medio ambiente: disociaciones y peligros”.
- 5 Cf. mi trabajo “La vida global en la eco-bio-tecnosfera”, Logos. Anales del Seminario de Metafísica 40 (2007) 55-75, donde se amplía y argumenta esta posición.
- 6 Cf. Barlow, M. y Clark, T.: Blue Gold: the Battle against Corporate Theft of the World’s Water, Toronto, Sttandard, 2002; y Barlow, M.: Blue Covenant: The global Water Crisis and the Fight for the Right to Water, Toronto, McClelland & Stewart, 2007.
- 7 Eliade, M.: Tratado de historia de las religiones, Barcelona, Círculo de Lectores, 1990, p. 237. Puede ampliarse el asunto en pp. 242, 244, 248 s.
- 8 Otra aproximación, en parte común, en la “experiencia del agua” según Caldecott, J.: Agua. Ecología de una crisis global, Madrid, Ediciones del lince, 2011, capítulo 3. Se trata además de un buen estudio de los diversos ecosistemas acuáticos (ríos, océanos, lagos, etc.) con los graves problemas que presentan.
- 9 Buena parte de los que siguen se han obtenido de la Edición Especial Agua. Un mundo sediento, de la Revista National Geographic, abril 2010, donde se especifican con rigor sus fuentes.
- 10 Según los estudios pioneros de Tony Allan en 1990, del King’s College, el “agua virtual” es la empleada en total por unidad de producción de cualquier cosa. Pronto daremos ejemplos concretos según los cálculos de Hoekstra, A. y Chapagain, A. K.: Globalization of Water, Water Footprint Network, Enschede, Universidad de Twente, 2008.
- 11 Recordemos que se trata en primer lugar de un negocio que elimina tierras de cultivo antes dedicadas a la alimentación y que no ayuda a paliar el efecto invernadero, entre otras cosas porque lo que ahorra en CO2 se compensa con la mayor cantidad emitida por los vehículos de óxido nitroso.
- 12 Véase waterfootprint.org Por otra parte, si añadimos el peso del ganado en el calentamiento climático por sus emisiones de gases orgánicos, en particular de metano, el resultado es demolidor respecto a las consecuencias del abuso de las dietas carnívoras, por no hablar del efecto para la salud.
- 13 La media de la distancia recorrida para el acarreo en el África subsahariana es de unos 6 km, aunque tiende a aumentar, y esta circunstancia afecta al 40% de los hogares en esa vasta zona.
- 14 Cf. El País, suplemento Tierra, nº 13, 19-4-2008.

- 15 Cf. Ávila, P. (ed.): Agua, medio ambiente y desarrollo en el siglo XXI, Zamora (Méx.), Suma-El Colegio de Michoacán, 2002.
- 16 Cf. Delgado, G. C.: “Agua, conflicto y seguridad”, en www.ecoportal.net (hay registro que facilita la localización). En España se gasta al año aproximadamente lo mismo en agua corriente que en embotellada (unos 1750-1800 millones de euros), según el Instituto Nacional de Estadística, 2007.
- 17 Suez y Veolia controlan el 70% de la gestión privatizada en el mundo, mientras que Coca Cola, Pepsico, Nestlé y Danone tienen en sus manos el 30% del negocio del embotellado.
- 18 Cf. Lohan: “Cómo hacen algunas pequeñas ciudades, la mayoría de ellas conservadoras, para derrotar a las corporaciones...”, en www.sin.permiso.info (14-2-2011). De la misma autora (ed.): Water Matters: Why We Need to Act Now to Save Our Most Critical Resource (Paperback) AlterNet, 2ª ed., 2010. Y también, para otras informaciones, incluido el mencionado monitoreo de los precios, véase www.foodandwaterwatch.org
- 19 Hoy existen en el mundo unas 800.000 presas, de las cuales 45.000 tienen una cortina de 15 o más metros, lo que provoca desplazamientos forzados de poblaciones, una mayor emisión de CO2 y metano por parte de la vegetación sumergida, un grado mayor de evaporación y salinización, pérdida de biodiversidad, etc.
- 20 Cf. García Calvo, E.: “¿Y si aliámos agua y energía?”, El País, La Cuarta Página, 2-10-2010.
- 21 Cf. Espinosa, L.: “El nihilismo virtual en la sociedad hipertecnológica”, Ágora 26-2 (2008) 79-101.
- 22 Cf. Barnett, J.: The Meaning of Environmental Security, London, Zed Books, 2001.
- 23 Cf. Agua. Un mundo sediento, op. cit., pp. 31, 42 s La lucha física por el agua es cotidiana en grandes urbes asiáticas, por ejemplo en Nueva Delhi.
- 24 Cf. el suplemento citado de El País, pp.34 s. Lo paradójico es que cada día se evaporan 1 billón de Tm de agua.
- 25 Cf. la desoladora y documentada obra de Welzer, H.: Guerras climáticas, Madrid, Katz, 2010, en particular pp. 14, 52 s., 127, 132 s., 149 ss., respectivamente.
- 26 Ibid. pp. 180 ss, donde se ofrece su enumeración y tipología, con reseña de los países, recursos en juego, etc.
- 27 El tercero y último hasta ahora es de 2009: WWDR3-Water in a changing World. Son recomendables las páginas web de las grandes instituciones (en donde puede localizarse), tales como www.unwater.org y UNESCO.org/water, además del worldwatercouncil.org
- 28 He tratado estos problemas globales en “Naturaleza e historia hoy: la crisis ecológica”, de próxima publicación en Azafea vol. 13 (2011), adoptando una narrativa en torno a la idea del mal menor.
- 29 Cf. una referencia útil en aguaplaneta.blogspot.com
- 30 Cf. Harris, M.: Caníbales y reyes, Madrid, Alianza, 1999, pp. 233ss. y 250ss.
- 31 Bauman, S.: Vida líquida, Barcelona, Paidós, 2006, respect. pp. 10s., 18, 22s y 127.
- 32 Cf. Lao zi. El libro del Tao, trad. y ed. de J. I. Preciado, Madrid, Alfaguara, 1994 (8ª ed.), cap. 43 y 76.
- 33 Cf. Eliade, op. cit., p.261.

À L'OCCASION DE LA JOURNÉE MONDIALE DE L'EAU



**MESSAGE DE LA DIRECTRICE GÉNÉRALE
DE L'UNESCO, IRINA BOKOVA**

[English version here](#)

Cette année, la Journée mondiale de l'eau se place sous le thème de « l'eau et le développement durable » et offre une occasion majeure de mettre en lumière le rôle de l'eau douce dans le programme de développement durable que les États sont en train de définir pour l'après-2015.

C'est le moment de fixer un nouveau cap, de changer les pratiques et les actions qui favorisent le développement à un coût environnemental et social considérable – pollution, déforestation, perte de diversité biologique et pauvreté urbaine croissante. Si l'on se fie aux tendances actuelles de la consommation, l'eau en général, et l'eau de qualité en particulier, seront insuffisantes pour répondre aux besoins croissants de la planète, à moins que nous ne changions radicalement la façon dont ces ressources limitées sont utilisées, gérées et partagées. Face aux demandes concurrentes, négliger ce fait rendra les décisions en matière d'allocation des ressources en eau de plus en plus épineuses. Dans un tel scénario, le risque de conflits localisés n'est pas à écarter.

Nous devons prendre des mesures concrètes pour parvenir à la durabilité à l'échelle mondiale, afin de ralentir le rythme du changement climatique. De tous les risques naturels, les catastrophes liées à l'eau sont désormais les plus destructrices d'un point de vue économique et social, touchant de façon disproportionnée les femmes ainsi que les populations pauvres et défavorisées et accentuant la pauvreté.

En 2015, s'appuyant sur l'expérience acquise dans le cadre des Objectifs du Millénaire pour le développement, les États élaboreront un nouveau programme mondial ambitieux pour le développement et définiront des objectifs concrets de développement durable. Le développement de la science, de la technologie et de l'innovation doit avoir une place centrale dans ce nouvel agenda. Il permettra d'évaluer les ressources en eau selon des techniques modernes, sur la base de systèmes d'information et de méthodes de gestion de qualité, et servira également de levier à la transition vers des modes de production et de consommation durables.

L'UNESCO s'engage à faire progresser ces objectifs à tous les niveaux, en mettant à profit sa « famille de l'eau », un atout unique qui se compose notamment du Programme hydrologique international, de l'Institut de Delft pour l'éducation relative à l'eau, du Programme mondial pour l'évaluation des ressources en eau à Pérouse, ainsi que des centres et chaires de l'UNESCO spécialisés dans l'eau partout dans le monde. L'année 2015 doit être l'occasion pour la communauté internationale d'entériner l'importance de renforcer les capacités et de partager les bonnes pratiques dans le domaine de l'eau pour construire l'avenir que nous voulons pour tous.

Irina Bokova, Director-General of UNESCO

Alma y lugar de acampada de la vida,

materia prima de todo lo que sueña...

conversación eterna con cuanto late y ríe,

así eres, agua,

compañera gozosa y errante

del despertar diario de la Tierra.

Desnudada en tu fuerza o hecha de murmullos,
pero siempre tenaz y contundente,
esbozas, silenciosa, un canto inacabado:

el del ciclo que vence a lo caduco

entrelazando el antes y el después,

y nos saluda, hora tras hora,

como una inmensa memoria del futuro.

Tu viaje es un azar alrededor del tiempo,
una escenografía de contrastes
que peregrina tenaz hacia su propio ser,

hilvana las cosechas,
se aposenta en la piedra y la moldea,
legitimando la fuerza de lo blando,
de lo que habita, al fin,
en la difusa entraña
de un mundo entretejido y rítmico.

Imposible atraparte con las manos,
toda tú libertad,
movimiento acunado por la luz,
que se recuesta sin prisa en nuestro cuerpo,
lo baña, lo cimienta,
lo arropa en su paseo por la vida,
feliz noticia, ininterrumpida.

En ti descubrimos quienes somos:
agua empapada de conciencia,
seres a media altura entre puerto y naufragio,

AGUA

iguales al llamarte, al alojarte,
al escuchar tu ritmo palpitante y próximo,
pleamar de caricias en nuestro ancho corazón.

Te nos muestras en todos los paisajes,
fugaz y ecuménica, leal a tu destino,
tan distinta de cualquier mercancía
que se compra y se vende en el mercado.

Así cantas, por los siglos,
resurrección diaria, manantial o bautismo,
legítimo regalo que a nadie invalida.

Te amo, agua,
cuando eres riego o lluvia, rocío o lágrima,
cuando te vistes de océano,
espejo y reflejo de todo lo que abre,

World Water Day

www.globaleducationmagazine.com

lugar donde hacen el amor las orillas,
aposento primero de la vida,
frontera que une, voluntad migratoria
en la que caben todos los anhelos.

Te amo, también,
con un amor jubiloso y extenso,
cuando eres río,
y te disfrazas de abrazo al territorio,
húmeda piel que bendice los suelos.

Metáfora de todo lo que fluye,
riego tenaz de cuanto crece y vive,
te deslizas sin fronteras, gratuita,
y no admites dueño ni precio

Libre y de todos, así te quiero, agua,
bañando el alma de cuantos tienen sed,
regando sus cosechas,
acompañando tu ritmo

tanto si manas de un caño solitario y común
como si eres manglar o cascada sin nombre.

al sueño del que sufre,
del que reclama pan
y otros mundos posibles.

Puente desnudo de la muerte a la vida,
no eres de nadie y eres de todos, agua,
y así deberá ser,
mientras nos quede la voz y la palabra.



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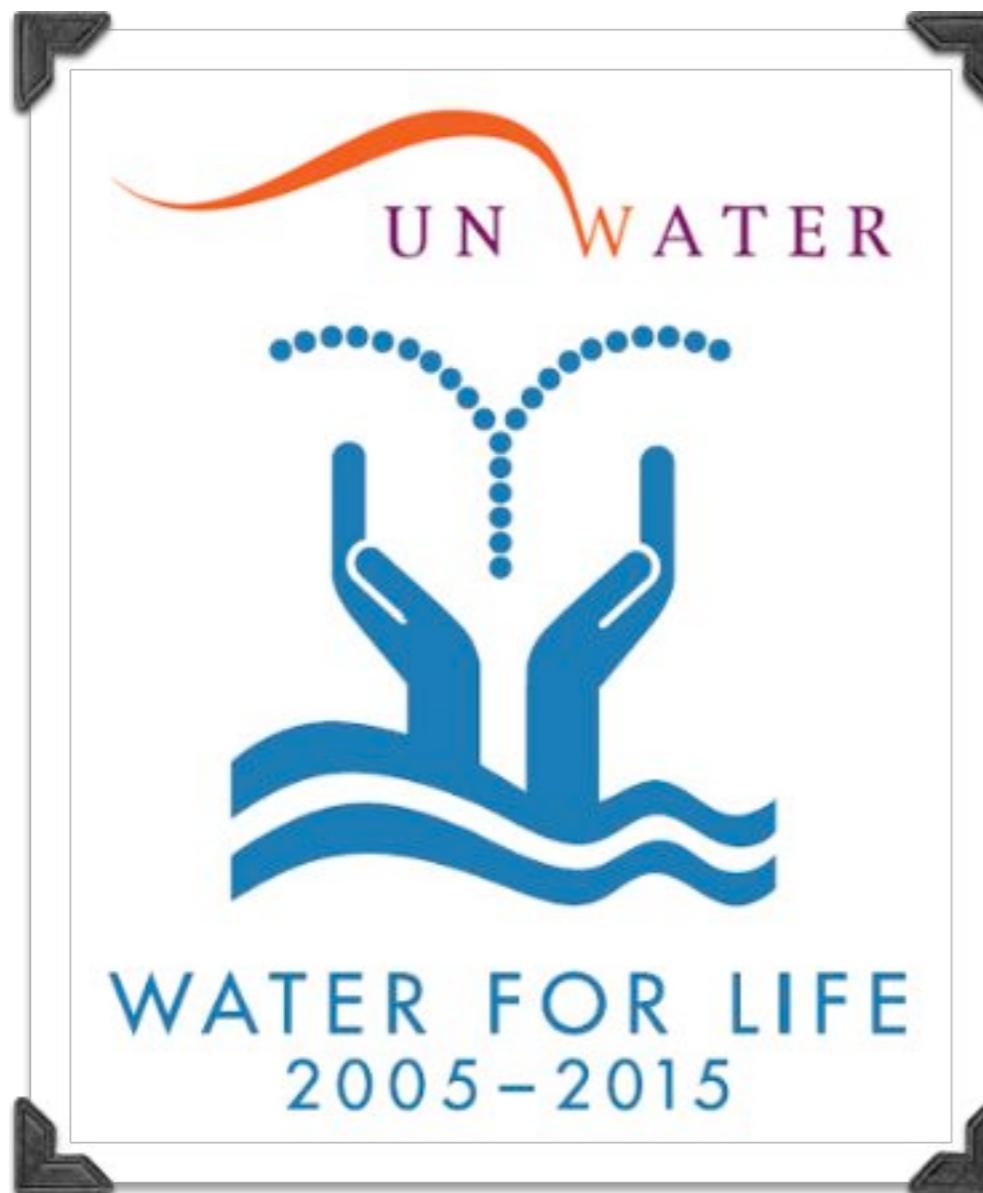
www.slowpeople.org



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INTERNATIONAL DECADE FOR ACTION "WATER FOR LIFE"

2005-2015



In December 2003, the United Nations General Assembly proclaimed the period 2005-2015 International Decade for Action "Water for Life" in its resolution [A/RES/58/217](#). The decade officially started on World Water Day, March 22, 2005.

The 'Water for Life' Decade aims to promote efforts to fulfill international commitments made on water and water-related issues by 2015. Focus is on furthering cooperation at all levels, so that the water-related goals of the Millennium Declaration, the Johannesburg Plan of Implementation of the World Summit for Sustainable Development, and Agenda 21 can be achieved.

The challenge of the Decade is to focus attention on action-oriented activities and policies that ensure the long-term sustainable management of water resources, in terms of both quantity and quality, and include measures to improve sanitation. Achieving the goals of the "Water for Life" Decade requires sustained commitment, cooperation and investment on the part of all stakeholders from 2005 to 2015 and far beyond.

UN-Water, is responsible for coordinating the 'Water for Life' Decade. UN-Water has in particular launched two initiatives to support the Decade:

- The [UN-Water Decade Programme on Capacity Development \(UNW-DPC\)](#). Hosted by the United Nations University in Bonn, Germany, the UNW-DPC strengthens the coherence and effectiveness of capacity development activities in the framework of the Decade.
- The [United Nations Office to Support the International Decade for Action 'Water for Life' 2005-2015/UN-Water Decade Programme on Advocacy and Communication \(UNO-IDfA/UNW-DPAC\)](#). Located in Zaragoza, Spain, and led by the United Nations Department of Economic and Social Affairs (UNDESA), UNO-IDfA/UNW-DPAC facilitates information, implements communication activities and raises awareness in the framework of the Decade. Read more



www.unwater.org

The UN-Water Annual International Zaragoza Conference was held in January and kicked off the year that will shine a spotlight on water and sustainable development.

2015 is an important year. An important year for disaster risk reduction, an important year for climate and an important year for water,” said the UN-Water Chair, Michel Jarraud in his welcome video message to the 300 participants at the UN-Water Annual International Zaragoza Conference. As United Nations entities and programmes, experts, representatives of the business community, governmental and non-governmental organizations met from 15 to 17 January in Zaragoza, Spain, the dialogue intensified around water and sustainable development.

The meeting was permeated by a positive spirit for the year to come and it was clear that all the stakeholders present – academia, business, civil society, governments, intergovernmental organisations, youth – were ready to play their parts in preparing for water’s role in the Post-2015 Development Agenda. As 2015 is the last year of the International Decade for Action ‘Water for Life’ participants also took stock of and learning from achievements as well as planning the next steps.

WHY WASTE?

Only 20% of global wastewater is currently being treated, leaving low-income countries hardest hit by contaminated water supplies and disease, according to the UN-Water Analytical Brief on Wastewater Management. The brief encourages governments to see treated wastewater as a valuable resource, and a priority for the post-2015 development agenda.

With urban populations estimated to double in the next four decades, and low-income countries possessing only 8% of the required capacity to treat wastewater effectively, **Wastewater Management, A UN-Water Analytical Brief**, produced by WHO, UNEP and UN-Habitat, on behalf of UN-Water, describes the damage

being done to ecosystems and biodiversity as ‘dire’ and warns of the threat wastewater will increasingly pose to human health, economic activity, and water security if left unaddressed. The report released on 2 February comes timely as discussions on how to expand water monitoring in the Post-2015 Development Agenda are underway. A new initiative launched by several UN-Water Members under the UN-Water umbrella is looking into how to best support Member States to develop water-related monitoring systems for sustainable development that are technically feasible, flexible, adaptable and cost-effective.

The first consultation of the initiative was held in Geneva on 29-30 January with Member States and technical experts to have a concrete exchange on the proposed indicator framework and methods for the analysis of wastewater, water quality and water resources management. The Ambassador for Bangladesh, H.E. Mr. Shameem Ahsan, welcomed the initiative underlining the importance for the “*sustainable and equitable path to growth for the least developed countries.*” Johan Gely, from the Swiss Agency for Development Cooperation which provides substantive support to the initiative said that “...by 2050 over 50% of the global population will be living in regions under water stress and the impact will be counted in trillions of dollar. We need to increase our spending on water monitoring.”

WORLD WATER DAY IN INDIA

With less than two months to go to World Water Day (22 March) many organizations and groups are preparing events and activities. The official UN-Water event will be held in New Delhi, India on Friday 20 March.

World Water Day is marked on 22 March every year. It's a day to celebrate water. It's a day to make a difference for the members of the global population who suffer from water related issues. It's a day to prepare for how we manage water in the future. In 1993, the United Nations General Assembly designated 22 March as the first World Water Day. 22 years later, World Water Day is celebrated around the world shining the spotlight on a different issue every year. In 2015, the theme for World Water Day is ‘Water and Sustainable Development’. This theme encourages thinking around how water links to all areas we need to consider to create the future we want. Each year, UN-Water provides resources to inspire celebrations for World Water Day. A dedicated website will be launched in the coming days but in the meantime, the logo in six languages can be [downloaded here](#).

RECOMMENDED READING

WATER LEX AND WASH UNITED: *The Human Rights to Water and Sanitation in Courts Worldwide: A Selection of National, Regional and International Case Law* -

Information about the legal enforcement of the human rights to water and sanitation.

WORLD ECONOMIC FORUM: *The Global Risks Report 2015* - After three consecutive years among the top three, water has now moved to the top position, as the greatest risks for human wellbeing and prosperity in the next ten years and beyond.

SAVE THE DATE!

20 MARCH 2015

LAUNCH OF
The United Nations *World Water Development Report 2015*
“WATER FOR A SUSTAINABLE WORLD”
AT WORLD WATER DAY CELEBRATIONS IN NEW DELHI, INDIA



From **FOOD** and
ENERGY SECURITY
to **HUMAN** and
ENVIRONMENTAL HEALTH,
WATER contributes to
IMPROVEMENTS in
SOCIAL WELL-BEING
and **INCLUSIVE GROWTH,**
affecting the
LIVELIHOODS OF BILLIONS.

www.unesco.org/water/unwap © UNESCO/UNDP/UNESCO

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United Nations
Educational, Scientific and
Cultural Organization



UN WATER
22 MARCH
WORLD WATER DAY 2015
WATER AND SUSTAINABLE DEVELOPMENT



The UN World Water Development Report 2015, Water for a Sustainable World

*The 2015 edition of the United Nations World Water Development Report (WWDR 2015), titled **Water for a Sustainable World**, will be launched at the official celebration of the World Water Day.*

The WWDR 2015 demonstrates how water resources and services are essential to achieving global sustainability. Taking account of economic growth, social equity and environmental sustainability, the report's forward-looking narrative describes how major challenges and change factors in the modern world will affect – and can be affected by – water resources, services and related benefits. The report provides a comprehensive overview of major and emerging trends from around the world, with examples of how some of the trend-related challenges have been addressed, their implications for policy-makers, and further actions that can be taken by stakeholders and the international community.

Download the World Water Development Report 2015, Water for a Sustainable World

The World Water Development Report 2015, Water for a Sustainable World

[PDF format](#)

ePub format for tablets (application needed)

Case Studies and Indicators, Facing the Challenges

[PDF format](#)

ePub format for tablets (application needed)

You may also purchase a printed copy of the book.

About the World Water Development Report 2015, Water for a Sustainable World

The 2015 edition of the United Nations World Water Development Report (WWDR), titled Water for a Sustainable World, demonstrates how water resources and services are essential to achieving global sustainability.

'Water is at the core of sustainable development'. Water resources, and the range

of services they provide, underpin economic growth, poverty reduction and environmental sustainability. From food and energy security to human and environmental health, water has been shown to contribute to improvements in social well being, affecting the livelihoods of billions. Progress towards the achievement of most sustainable development goals requires significant improvement of water management across the globe.

The year 2015 marks a critical milestone on the road to sustainable development. As the **Millennium Development Goals** come to a close, a new cycle of **Sustainable Development Goals** (SDGs) is poised to guide national governments and the international community in the quest to achieve a sustainable world.

This latest edition of the WWDR clearly demonstrates how water is critical to nearly every aspect of sustainable development, and how a dedicated SDG for water would create social, economic, financial and other benefits that would extend to poverty alleviation, health, education, food and energy production, and the environment.

Taking account of economic growth, social equity and environmental sustainability, the report's forward-looking narrative describes how major challenges and change factors in the modern world will affect – and can be affected by – water resources, services and related benefits. The report provides a comprehensive overview of major and emerging trends from around the world, with examples of how some of the trend-related challenges have been addressed, their implications for policy-makers, and further actions that can be taken by stakeholders and the international community.

What's new

The report begins by describing a world in the not-so-distant future in which water resources and water-related services are managed in such a way that the benefits derived from water are maximized and shared equitably throughout the world.

This vision is not merely a fictional utopian outlook; it is a future that is entirely achievable, a future in which water is recognized and managed as the fundamental resource that supports all aspects of sustainable development. This vision represents a new and innovative approach to the WWDR, prompting readers to reflect on how our world could be, provided appropriate changes are made to the way water resources are perceived and managed.

Resource: <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2015-water-for-a-sustainable-world/>

Le droit de rêver... à un autre monde possible



Le droit de rêver est synonyme de recherche de (micro ou macro) alternatives, dans une réalité sociale chaque jour en construction ou dans l'élaboration de concepts et de théories aspirant à promouvoir le bien commun. Un pari pour comprendre autrement la planète, la solidarité internationale et les nouvelles relations entre les peuples.

Terre, démocratie sociale et éthique collective

Une municipalité où chaque travailleur perçoit le même salaire, environ 1200 euros pour 35 heures de travail, dans une Espagne qui continue de vivre une forte crise structurelle et une Andalousie où les chiffres du chômage dépassaient, fin 2014, 24 % de la population économiquement active.

Marinaleda[1] – une superficie d'à peine 25 km² et moins de 3000 habitants, une économie fondamentalement agricole et une administration de gauche depuis 35 ans – a réussi cette gageure : consolider un « micro-modèle alternatif » de société. Chaque famille peut y disposer d'un logement, moyennant un loyer de 15 euros mensuels. Les prix des services sont minimes, la garderie (avec une cantine) ne coûte pas plus de 12 euros par mois.

La concrétisation d'un État social, résultant d'une autre manière de faire et de comprendre la participation et la politique. Où le parti gouvernemental[2] et le puissant syndicat agricole[3] renforcent mutuellement leur synergie en utilisant les instruments institutionnels de la mairie pour impulser des avancées substantielles dans la mise en oeuvre d'une réelle démocratie sociale.

Les « Sans-terre » pensent à la société entière

À 10.000 km de ce laboratoire andalou, le Mouvement des travailleurs ruraux sans-terre (MST), au Brésil continue d'exercer quotidiennement son « droit collectif aux alternatives »[4].

Considéré comme l'un des acteurs sociaux les plus importants du continent, promoteur notoire du réseau international Via Campesina[5], il a développé une nouvelle conception du pouvoir autour de la lutte pour la terre et la réforme agraire.

Toute nouvelle occupation de terres improductives s'accompagne, comme premier pas, de la construction d'une petite école pour les enfants des occupants. Chaque mobilisation rurale cherche à se renforcer grâce à une large alliance citoyenne. Les fonctions dirigeantes sont assumées par rotation, avec un aller et retour permanent de la direction (coordination) aux bases et réciproquement ; il n'existe ni président, ni secrétaire général, la direction étant collective et décentralisée.

Durant ces dernières années, les luttes communes sont devenues quasiment une obsession politique pour le MST. Ouvrant ainsi son action à d'autres acteurs du monde rural, urbain, académique, à la société civile en général, pour parvenir à une articulation et une synergie plus complètes de ses objectifs et de ses combats.

Parmi les objectifs centraux du MST, l'un des plus fondamentaux est la souveraineté alimentaire. Elle implique d'affronter le modèle de production de l'agro-négoce – basé prioritairement sur l'exportation – et notamment de dénoncer activement l'usage abusif des engrangements toxiques. Aujourd'hui, chaque Brésilien-ne consomme annuellement 5 litres de poison et la lutte contre ce système doit être l'œuvre la société brésilienne tout entière. Un tel affrontement doit inclure, selon le MST, le débat pour un changement de paradigme dans le monde rural.

Le Mouvement a déjà obtenu l'octroi de parcelles pour plus de 400.000 familles. Sur les terres occupées, des centaines de coopératives et d'associations assurent la production d'aliments. Celle-ci est complétée par le développement de l'agro-industrie. Les « Sans-terre » contestent le modèle dominant qui considère la terre comme un simple marchandise, préconise la

monoculture, et a pour principal objectif l'agro-exportation, ce qui déprécie totalement la nature, l'environnement, le sol et l'être humain lui-même. Pour leur part, ils défendent le paradigme de la production familiale agroécologique, fondée sur la coopération agricole avec le nécessaire ingrédient de l'agro-industrie.

Les villes du futur

De la campagne aux centres urbains, il n'y a qu'un pas. Du riz biologique certifié du Rio Grande do Sul au budget participatif comme outil de démocratie directe, telles sont les facettes d'une même et nouvelle application du « droit à rêver ».

Porto Alegre – capitale de cet Etat méridional du Brésil – s'est lancé dans la création de cet outil. En 1989, le Parti des Travailleurs (PT) venait de gagner les élections municipales. Un moment opportun pour soumettre les priorités financières et budgétaires à un exercice graduel et lent d'analyse collective, grâce à des assemblées citoyennes élisant des délégué-e-s, depuis les quartiers et les régions jusqu'à la ville entière.

L'expérience novatrice du budget participatif fut l'aimant qui attira la convocation, en 2001, dans cette ville, du 1er Forum social mondial (FSM). Après 14 ans d'existence et 9 réunions centralisées, tenues sur 3 continents différents (Afrique, Asie, Amérique latine), le FSM est devenu l'espace de réflexion et d'échange le plus large sur lequel peut compter actuellement la société civile planétaire organisée. Et il s'autoconvoque aujourd'hui dans la capitale tunisienne, pour la dernière semaine de mars 2015.

25 ans après cette première expérience brésilienne de budget participatif, plus de 1500 villes, dans le monde entier et de dimensions fort diverses – Brasilia, Buenos Aires, Bologne, Séville, Málaga, Portland, Ontario, Yokohama, etc. – le pratiquent actuellement dans les variantes et modalités les plus variées.

La cité de demain est en

construction, soulignent des urbanistes socialement engagés qui, au cours des dernières années, ont enrichi les concepts et les propositions. « Tout individu doit s'approprier l'ensemble de la cité », soulignent ces urbanistes. Cela signifie se battre pour les espaces publics, lutter pour l'eau potable, la construction d'écoles et de dispensaires, les transports collectifs...

Dans ce cadre, les alternatives prolifèrent dans le monde, parallèlement à l'accentuation des tensions urbaines résultant de la concentration excessive de population. Telles les « Community Land Trust », plus de 250 structures collectives de propriété foncière nées aux Etats-Unis depuis les années 1980. Ou les coopératives d'habitation dans tant d'autres villes du monde, visant à favoriser, dans un but social, une démocratisation de l'accès à la propriété citadine. Tout comme les propositions, en nombre croissant, d'agriculture urbaine ou périurbaine, les jardins collectifs, et tant d'autres initiatives socioculturelles au niveau des quartiers qui tentent de modifier les paradigmes d'appartenance et d'appropriation citoyenne.

Les zones à défendre : le « zadisme » comme mouvement

Il s'agit d'expériences de résistance citoyenne, qui couvrent par dizaines le territoire français et s'étendent en Europe – Belgique, Pays basque – en réactualisant une méthodologie de lutte ancienne basée sur l'occupation des lieux. Ceci afin de s'opposer aux « grands projets inutiles imposés » (GPII).

« Zones d'aménagement différé » pour les « aménageurs », Zones à défendre (ZAD) pour les résistants, les ZAD sont en effet des zones pour y vivre – c'est-à-dire des espaces de vie – résultant notamment de luttes contre des projets d'infrastructure jugés inutiles ou surdimensionnés. Par exemple, l'aéroport « retardé » de Notre-Dame-des-Landes (Loire Atlantique), le barrage controversé de Sivens conçu pour l'irrigation de terres agricoles sur un affluent du Tarn – où les protestations ont coûté la vie, en octobre 2014, au jeune Rémi Fraisse. Ou encore, dans le département du



*Foro Social Mundial 2013: Marcha de apertura en la capital de Túnez.
Foto: Sergio Ferrari*

Rhône, l'opposition au grand stade de l'Olympique lyonnais.

Ces luttes tenaces, souvent héroïques et de longue durée (des mois, voire des années...) remettent en question les critères dominants de croissance, de production, de consommation et de propriété, pour inventer de nouvelles formes de citoyenneté et de responsabilité collectives.

Il existe une autre pensée possible...

Au cours des dernières années, grâce en particulier à l'explosion de la participation indigène à de nouveaux processus politiques en Amérique Latine – Bolivie, Equateur, etc. – le concept du « bien vivre » comme alternative au développement économique conventionnel a pris une certaine consistance. Cette vision est fortement présente chez une grande partie des peuples indigènes du continent, mais elle gagne en visibilité politique dans les nouvelles constitutions de ces deux Etats andins^[6].

Nouvelle relation avec la « Terre Mère » (la *Pachamama*), rupture avec la logique anthropocentrique propre au capitalisme et au défunt « socialisme réel », questionnement de concepts jusqu'ici inébranlables comme ceux de développement et de croissance, ont ouvert un cadre conceptuel qui véritablement, dans le Nord également, des réflexions intéressantes.

Ainsi les théories et les conceptions développées par le mouvement des objecteurs de croissance, qui ont exploré et déployé un nouvel espace intellectuel en France, en Suisse et dans d'autres pays européens. Cela sans sous-estimer la revitalisation de la réflexion sur l'« écosocialisme »^[7] qui, bien que n'étant pas nouvelle, acquiert une certaine actualité dans les débats politiques européens en raison notamment de la crise de la pensée social-démocrate^[8].

À quoi s'ajoute la naissance de théories « nouvelles » : en particulier celle du « bien commun » ou « bien public », comme projet économique ouvert aux entreprises cherchant à implanter une économie soutenable et comme alternative aux marchés financiers.

Il convient également d'incorporer à ces nouveaux territoires de la pensée et de l'action les réflexions constantes sur la communication alternative comme nécessité et condition idéologique pour rapprocher les mondes, promouvoir la conjonction d'expériences, revitaliser sans cesse le débat sur les concepts et les paradigmes.

Les pratiques locales, les expériences globales, les théories revivifiées, les nouvelles formes de pensée... Une recherche concrète, un zigzag de propositions, un exercice actif de « citoyenneté globale » pour ne

pas sacrifier son droit à rêver. En le revitalisant collectivement, du 24 au 28 mars, lors du prochain Forum social mondial dans la capitale tunisienne.

- **Sergio Ferrari**, contribution d'E-CHANGER/COMUNDO, ONG de coopération solidaire activement engagée dans le FSM

(Traduction : Hans Peter Renk)

[1] Pour de plus amples informations, cf. l'article « Marianaleda » de Wikipedia : <http://fr.wikipedia.org/wiki/Marianaleda>

[2] Collectivo de unidad de los trabajadores – Bloque andaluz de izquierda (CUT-BAI)

[3] Sindicato de los obreros del campo – Sindicato andaluz de los trabajadores (SOC-SAT)

[4] Pour de plus amples informations, cf. l'article « Mouvement des sans-terre » de l'encyclopédie Wikipedia : http://fr.wikipedia.org/wiki/Mouvement_des_sans-terre ; dossier « Mouvement des sans-terre » sur le site « Mémoires des luttes » : <http://www.medelu.org/-Dossier-Mouvement-des-sans-terre->

[5] En Suisse, le syndicat paysan Uniterre est affilié à Via Campesina: www.uniterre.ch/index.php/fr/

[6] Ce qui n'exclut malheureusement pas, comme c'est le cas actuellement en Equateur, des situations fortement conflictuelles entre le gouvernement de Rafael Correa et les mouvements indigènes (la CONAIE), notamment par rapport à des visions divergentes de la politique écologique dans ce pays.

[7] Cf. les documents d'« Alternatives face aux défis écologiques : rencontres européennes », tenues à Genève, du 24 au 26 janvier 2014, organisées par le groupe écosocialiste de solidarités : www.solidarites.ch/geneve/ecologie-menu/59-ecosoc/708-2014-01-24-26-rencontres-europeennes-alternatives

[8] Crise dont la dernière manifestation est (provisoirement) la politique concrète du gouvernement français de Manuel Carlos Valls Galfetti et de son nouveau ministre de l'économie, le banquier Emmanuel Macron...

<http://alainet.org/active/81122&lang=fr>

Environmental Governance and Sustainable Development: An Interview with Georgios Kostakos



By Fen Wang

Founder and President at GEC; UNEP Reform Project Leader at Tema at Linkoping University; SCO Project Leader at Vermont University; My mission is to contribute myself in global environmental and sustainable development governance and act to accelerate transitioning the society to green economy with sustainable development, and to join together with world visionary leaders to fight and combat the climate change that threaten life of all.



I got the opportunity to talk to Dr. Georgios Kostakos: Executive Director of the Foundation for Global Governance and Sustainability (FOGGS); formerly Acting Deputy Executive Secretary of the UN Secretary-General's High-level Panel on Global Sustainability (GSP); UN Secretariat staff at headquarters and in the field; Associate of the Hellenic Foundation for European and Foreign Policy (ELIAMEP) and the University of Athens.

This is what he had to say about environmental governance and sustainable development:

Fen Wang: How do you value international law in regard to addressing global environmental issues?

Georgios Kostakos: Let me start by stating that I am not a lawyer, so I am not so familiar with, nor so motivated by, the legal approach to international relations. There are a lot of Multilateral Environmental Agreements (MEAs), conventions and protocols, which means a whole set of legally binding international instruments. They

have been, however, negotiated via political / diplomatic means and they are often vague and lacking in hard-hitting enforcement measures, unless it is for specific hazardous substances. Thus, international law has limited value in addressing broader environmental issues, beyond setting an overall framework of principles and norms. Nonetheless, as part of their broader competences, international courts like the International Court of Justice (ICJ) can be asked to adjudicate in cases of disputes among states, including on environmental issues. Interestingly enough, regarding climate change, there are efforts to have a resolution passed in the UN General Assembly that would ask the ICJ for an advisory opinion that would define states' obligations and responsibilities with respect to greenhouse emissions under international law (see policy brief issued by The Hague Institute for Global Justice). Even if that goes ahead, though, there is no guarantee that the Court will decide to take a position, and even if it does it could go either way and will only be an advisory opinion. It might not establish clarity on liability and obligation to act that would reassure small island developing states of not sinking into the rising seas in the coming decades. For now, therefore, the main battleground for addressing major environmental issues is, in my view, diplomatic / political and economic, as well as social, in terms of necessary lifestyle changes. Legal approaches can be complementary, especially at the national level, where legislation is stricter and can be put to better effect by willing governments and civil society activists.

FW: Is there any possibility to put UNEP, UNDP and UN Social and Economic Council into one organization, e.g. UN Sustainable Development Organization? Is this a realistic idea? Somehow, there are arguments supporting this idea, e.g. those views expressed in my paper,

GK: UNDP, UNEP and ECOSOC are quite different creatures, with their own histories, respective advantages and disadvantages. They are also very different in nature, as ECOSOC is a principal organ of the UN, an intergovernmental body; UNEP has an intergovernmental Assembly but is

primarily an expert advisory body; and UNDP has an intergovernmental Board but is primarily an implementing body. They may be complementary, and ECOSOC does review the work of the other two, but if you want to join them to cover sustainable development as a whole why not also merge together the World Bank, WTO, WMO, UNFCCC, FAQ, IFAD, WHO and ILO, to mention a few? This would be a super-organization that would probably be too complex and difficult to run. The same results could probably be achieved by improving overall leadership and coordination for what is known as "the UN system" of specialized agencies, funds and programmes around the UN proper. At its centre, there is a need for some kind of sustainable development (SD) council, like the UN's Security Council, for intergovernmental guidance, an overall shared vision for the direction of our world, and a pro-active Secretary-General. The recently established High-level Political Forum on Sustainable Development, stipulated by Rio+20, which operates under both the UN General Assembly and ECOSOC, could be empowered to play the SD council role, but its universal membership and consultative rather than decision-making character may well turn it into another talk shop. Perhaps the G20, if brought into the UN context and with whatever modifications, could become that SD council, or the Security Council could have an alternative configuration as SD council. All this, however, would require UN Charter amendment for a proper assignment of authority and responsibilities to a new or modified body, which seems difficult to come about these days. As for a common vision, the **Sustainable Development Goals** (SDGs) currently being negotiated could provide that, if they are not too technical, piecemeal and bureaucratic.

FW: If I would ask you for your personal statement on the input of Science and Technology towards the Post 2015 Framework for Disaster Risk Reduction, what would that be?

GK: Do you mean the input of science and technology into the post-2015 Hyogo Framework for Action on disaster risk reduction, or into

the overall post-2015 (sustainable) development framework? In any case, science, technology and innovation are major assets in achieving any global goals, be they the **Sustainable Development Goals** (SDGs) that are being negotiated for the post-2015 period, disaster risk reduction, climate change mitigation and adaptation, etc. – all of which are interconnected anyway. Science and technology, however, can point to problems and suggest possible solutions. It is up to policy-makers to take the scientific findings and advice into consideration and create a political and economic environment, within which these can be put to good use. Better interaction between science and society would also help put pressure on politicians to act according to scientific and technological advice.

FW: What are your reflections on the reality of the past UN MDGs? and what are your reflections on the new post-2015 agenda on UN MDGs?

GK: The MDGs were limited to addressing some key social issues in developing countries, and they actually helped focus efforts towards advancing those. They did not cover all aspects of sustainable development nor did they apply to developed countries, except for the latter's obligation to provide development assistance to developing countries. The **Sustainable Development Goals** (SDGs) that are under consideration by the UN General Assembly and should be adopted in September 2015 would be much more complete in terms of issues and universal coverage. But with 17 SDGs proposed as of July 2014, and under them a total of 169 targets, it is difficult to see how the new set of goals and targets will become operational and effective. There will probably have to be a merging of some proposed goals to get closer to the number of the MDGs, which were eight, with a great dissemination and heuristic value, thus mobilizing governments, civil society, the private sector and individuals even at least as much as the MDGs did.

FW: What about your views on institutional reform of sustainable development at the United Nations?

GK: As I said earlier, we need a strong intergovernmental body of limited membership in the centre of the “SD Universe” to act as its “brain” and first-recourse decision-maker. I would see a parallel configuration of the UN Security Council, and/or bringing into the UN the G20, and/or a drastically streamlined and shortened (in terms of membership) ECOSOC to play that central role. The UN Secretary-General should also become a more effective chair of the UN system, thus providing the overall vision and leadership that will guide formulation of innovative ideas, policy-making, monitoring and implementation more authoritatively and productively. Of course, in addition to governments at various levels (including national, regional and local), the private sector and civil society should be brought into deeper partnership with the UN, mobilizing their respective resources for advancing the common vision. Especially regarding the involvement of the private sector, this should not be limited to big multinational companies alone, but should encompass small and medium enterprises and entrepreneurs, while civil society involvement should be really global and not limited to some big NGOs with permanent or semi-permanent presence in New York.

FW: Thank you very much Dr. Kostakos, for taking a moment to talk with GreenEarthCitizen and to share your thoughts with us in Global Education Magazine.

read the original interview [here](#)

You may be interested to read "[A Tale of Two UN Processes: The Global Sustainability Panel and Rio+20](#)" written by Dr. Georgios Kostakos and published on October 17th: International Day for the Eradication of Poverty in [Global Education Magazine](#)

From Rio+20 to the New Development Agenda: An Interview with Felix Dodds



By Maria Bolevich

Maria Bolevich is a specialist of environmental protection and a journalist. She likes books, languages, journalism, green lifestyle. She lives in Croatia. Her favorite quote is " Nothing great was ever achieved without enthusiasm"



Maria Bolevich: I have the honor to present you our interview with Felix Dodds, a fellow at the Global Research Institute at University of North Carolina and an Associate fellow at the Tellus Institute. He was until recently the Executive Director of Stakeholder Forum for a Sustainable Future (1992-2012). He played a significant role in the Rio +20 Conference and has been active at the UN since 1990 attending key meetings on sustainable development.

Since 1985 to 1987, you were the chair of the UK LIBERAL YOUTH WING PARTIES. How much political experience has helped you and are today politicians sufficiently interested for the environmental protection?

Felix Dodds: What being active in a political party did was help me understand the way politicians act and the way policy is developed and the role the civil servants have in it. Most NGOs do not and that puts them at a huge disadvantage when dealing with the political process. As far as politicians interest in the environment is concerned it depends some come to the issue through an understanding of the impacts policies are having on

their community, their country the world others come from a religious values perspective that we are custodians of the planet for God and then others through an interest in the issues themselves. Mrs. Thatcher is a classic example of that she was a scientist and so when Joe Farmer of the British Antarctic Survey found the hole in the ozone layer in 1982 she understood enough of the science to realize that urgent action was needed and pushed other government leaders to ratify the Montreal protocol and to set an early date for the banning of ozone depleting chemicals completely. I myself got involved in environmental issues because I lost a vote so we have our own strange paths.

MB: You have been active in the UN since 1990; you attended the World Summit of Rio Earth Summit, Habitat II, Rio+5, Beijing +5, Copenhagen +5, World Summit of Sustainable Development, and Rio+ 20. What can we learn from the differences between countries and their representatives on the summits and their relation to sustainable development? Which the conference was the biggest challenge for you and why?

FD: Really two of them WSSD was a huge challenge because after enormous preparations the impact of 9/11 was huge on reducing what the summit could achieve and working in that environment was very tough. The other was Rio+20 because as far as globally environment and sustainable development was dead by 2006 when the SA

president Mbeki called it out and said the Johannesburg Plan of Implementation was dead and it was president Lula of Brazil who called for a new summit in 2012. I and Stakeholder Forum worked tirelessly to persuade the Europeans and US to support a new Summit and that included going round capitals meeting civil servants, Ministers and stakeholders to get them online.

MB: Since 1972 till now what was the best thing we done for our planet Earth? What if the World Conference has never held, whether the environment would have been now in the worse condition and why despite all the laws, goals, projects the future does not look so great with all these predictions?

FD: Without the setting up of UNEP by the Stockholm Conference much of the international law on environment probably wouldn't exist. One of the byproducts of Stockholm was the monitors on whaling which would not have happened without Stockholm and the leadership of Maurice Strong. Without Rio 1992 we wouldn't have had the setting up of ICLEI or WBCSD which have played a critical role in advocating and producing toolkits for local government and industry. Without the Millennium Summit we wouldn't have had the MDGs and a doubling of aid to help deliver them. Without Johannesburg Kyoto probably would not have come into effect it focus the media on persuading the remaining countries to ratify. Without Rio+20 we wouldn't have had the SDGs. Colombia and Guatemala put them on the table in 2011 and

the development ministries and many of the big development NGOs fought against them as they just wanted a new version of the MDGs not these 'sustainable development goals' which would apply to ALL countries.

MB: What do you think about New World Order?

FD: If you mean the idea that there are people conspiring to get their way of course that's true. I myself work with friends to get what I think would be good policies to make the planet sustainable. The changes we would like to see will have an impact on the profits of certain companies some of which over time will have to adapt or go under. That causes them to work against the changes that I would want. I'm putting this in the context of me but it's true for any one working for change or to stop change you are always looking for allies to support your causes. Of course the powers that we are up against are financially strong and that makes it more difficult. We have on our side science and in the end the combination of good science and good people will I believe win the day.

MB: Is it the CDM (Clean Development Mechanism) effective?

FD: It clearly has had its problems but this has been because of the low price of carbon and the failure of governments to guarantee its existence into the future. Until that is resolved I don't believe it will deliver what it should do.

MB: Are the anticipatory measures prevailed over the preventive and precautionary?

FD: We seem to have difficulty in building effective precautionary systems and so until a system shows itself in need of reform we tend to leave it alone. This can have huge impacts for the future. I think the work of Johan Rockstrom and the other 70 scientists in defining nine planetary boundaries will and should help ensure we can be more preventive and precautionary. Its clear much more is being said and done to build resilience in coastal communities to sea level rise as example. The science again will play a significant role in enabling politicians to take more difficult decisions.

MB: Is it sustainable development possible with, for instance with genetically modified food and why the people must sign the petitions for food labeling, is it human right to know what they are eating?

FD: I am a huge supporter of food labeling – I do think it's our right to know what we are eating. I have also been a supporter of a moratorium on GMOs .What is needed in my view is an Intergovernmental panel on GMOs and the equivalent. Perhaps under the leadership of the UN Secretary Generals chief Scientist. It should work on the basis of the precautionary principle that it is up to the companies to show it does not do damage. We should not be their guinea pigs.



MB: "States shall therefore respect international law providing protection for the environment in times of armed conflict and cooperate in its further development, as necessary" is this possible in reality? How people in times of armed conflict can think about the environment?

FD: I think it's very very difficult if not impossible but if countries do intently do something that has environmental harm they should be held accountable if it causes death then the International Criminal Court should be used.

MB: Are women sufficiently represented in science?

FD: As a former science and mathematics teacher I would say not there needs to be much more done in the schools to engage women in science. I know I tried very hard to do that when I taught.

MB: How much money is spent annually on the realization activities from Agenda 21?

FD: There is no record. In Rio Maurice Strong estimated that there would need to be \$625 billion spent and of that \$125 billion would be from developed to developing countries. In 1992 that was only \$60 billion to developing countries. The UN Commission on Sustainable Development monitored this in its first ten years. It was expected that the peace

dividend from the break up of the former Soviet block would enable this to happen but two things stopped it. The first was a recession caused by the 1st Iraqi war and the second was much of the money went to stabilize many of the new democracies of the eastern block. This saw funding for development aid drop to \$56 billion by 1997 and then only come back to \$60 billion by 2002. In the last ten years aid has doubled but it has focused on the MDGs and on the aftermath of war as a result of 9/11

MB: Will the MDGs be achieved by the certain deadline and how much it is difficult in this socio-economic situation to reach the goals?

FD: The UN has a report out which indicates many will be realized but some will not – one that will not will be the one on sanitation which was added by WSSD. These will then be part of the new targets agreed next year.

MB: Acidification, overfishing, waste, endangered species ...why the oceans are not sufficiently protected, and sometimes there is an impression that we deal it more with things which strikes us on the surface than for instance coral reefs?

FD: Oceans are not protected enough because they are not under a mechanism that enables them to be protected. Beyond national jurisdictions is one of the major issues for the next ten years. As far as mining is

concerned it's like a wild west out there and so governments are under pressure by their companies not to set up a system to limit this. One of the positive aspects of drones and satellites is that we will be able very shortly to have a much clearer idea who is doing what. We need more marine parks agreed where fishing is illegal and we need proper action against fleets that take no notice. On acidification it's an issue for the climate negotiations if we move away from fossil fuels that will have a huge impact in enabling the oceans to recover

MB: You follow film festivals, what do you think about the movies relating to climate change, the end of the world...?

FD: I think that documentaries on environmental issues are mostly a waste of time the same people watch them. What we need are movie blockbusters, TV shows that take environmental themes and weave them into the narrative. It's difficult the challenge is to indicate the problem and be positive about the way out of it. In documentaries I never watch depressing end of the world ones. It's counterproductive to inspiring change.

MB: Is Miguel Arias Cañete as the new energy and climate commissioner the right choice?

FD: Well he is from Andalusia as someone who used to live in San Sebastian (Donostia) in The Basque Country we would always

worry about those from Andalusia. But seriously some of the best environmental ministers have come from the right not the left. I am sure he will do his best to be successful in the brief which if you read the letter inviting him to be the Commissioner is very clear what is expected of him.

MB: Year 2020, how do you see our world and how much your role will be helpful?

FD: By 2020 we should be five years on to delivering the SDGs I would like to see annual debates in parliaments holding the executives accountable to what they agreed in 2015. I would hope by 2020 we have a climate agreement it's clear that will not happen in Paris in 2015 and so we will have to wait for the 2016 elections in the US to hopefully return a US president and 60 members of the Senate who are prepared to ratify an agreement. The last environmental treaty the US ratified was the UNFCCC in 1993.

I am not sure what my role will be possibly that directing the Nexus conferences – Water-Food-Energy- Climate I will have helped ensure a more integrated approach to these issues which are so interlinked.

MB: Thank you very much for sharing your thoughts with us!

Source: <http://greenearthcitizen.org/felix-dodds-for-green-earth-citizen/>



**ENTREVISTA CON CRISTINA NÚÑEZ-MADRAZO,
DIRECTORA DEL CENTRO DE ECOALFABETIZACIÓN Y
DIÁLOGO DE SABERES DE LA UNIVERSIDAD VERACRUZANA**



Dr. Atila Ertas haciendo entrega del distintivo TheATLAS Fellowship para Cristina Núñez-Madrazo, en Taichung (Taiwán) Junio 2014

Javier Collado Ruano: Esta es una entrevista muy especial para mí porque considero que una relación saludable entre las diferentes civilizaciones humanas es el punto de partida para conseguir una solidaridad global para el futuro común en la Tierra. En este sentido, la **Doctora Cristina Núñez-Madrazo** es un gran ejemplo de este profunda convicción, porque su pensamiento visionario nos ha enseñado muchas lecciones valiosas en **conocimiento, espiritualidad y ecoalfabetización**. Actualmente, ella es directora del Programa de Doctorado en Estudios Transdisciplinarios en el **Centro para la EcoAlfabetización y Diálogo de Saberes en la Universidad Veracruzana en Xalapa, México**. Estoy muy feliz porque la conocí en la Conferencia TheATLAS de 2014, Transdisciplinariedad, Transnacionalidad y Transculturalidad, que tuvo lugar en Taichung (Taiwán) en la Asia University durante los días 8 y 13 de Junio de 2014. Estimada Cristina, es un gusto enorme poder compartir tu energía, experiencias y sueños con nuestros lectores y lectoras.

Cristina Núñez-Madrazo: Agradezco mucho la oportunidad de Global Education Magazine para compartir nuestro proyecto educativo y de investigación transdisciplinaria en el Centro de EcoAlfabetización y Diálogo de Saberes de la Universidad Veracruzana.

JCR: Como educador, me gustaría comenzar esta pequeña entrevista preguntándote sobre el papel de la espiritualidad en la dimensión humana para alcanzar un futuro sostenible. ¿Cuánto tiempo están trabajando en el Centro para la EcoAlfabetización y Diálogo de Saberes? ¿Cuántos programas hay? ¿Cuándo fue fundado?

CNM: La **espiritualidad** es una dimensión fundamental que cruza transversalmente nuestro quehacer educativo. Su inclusión, a través de la praxis transdisciplinaria y el enfoque ecopedagógico, nos permite generar una transformación personal y profesional que comprende al ser humano en sus múltiples dimensiones y que incluye la dimensión emocional e intuitiva del proceso de conocer.

Asimismo, a través de la noción de **espiritualidad laica** - libre de creencias y dogmas- descubrimos la necesidad de **reencontrar nuestra pertenencia al planeta tierra y de despertar nuestra conciencia participativa**, lo cual implica sentirnos parte de nuestro entorno y considerar a los elementos de la naturaleza y a nosotros mismos como seres vivos habitantes del planeta Tierra.

Entendemos **la espiritualidad** como una experiencia que conecta todo lo viviente y a los seres humanos con la totalidad, lo cual permite crear un sentido de conexión profunda con la creación y con la vida. De la misma manera entendemos a **la sustentabilidad** a través de la conciencia en una ecología general que implica el reconocimiento de que somos partícipes y estamos inmersos en una gran totalidad.

El Centro de EcoAlfabetización y Diálogo de Saberes de la Universidad Veracruzana se creó en 2010 a partir de la iniciativa de un grupo de investigadores, profesores, estudiantes y personas de la sociedad civil que buscábamos formas abiertas y dialógicas de crear conocimiento desde la Universidad, reconociendo la crisis ambiental, humana y planetaria, y la urgente necesidad de colocarnos ante ella con una ética responsable y comprometida.

El Centro EcoDiálogo es un espacio educativo que recibe estudiantes de diversos niveles y de todas las áreas del conocimiento. Tenemos varios programas de posgrado, donde abordamos desde una **perspectiva compleja, transdisciplinaria y ecopedagógica** las problemáticas actuales de las sociedades humanas.

La **Transdisciplinariedad**, la **Eco-Alfabetización** y el **Diálogo de Saberes** son los tres pilares que sostienen una perspectiva educativa dirigida a **formar profesionistas e investigadores creativos**, capaces de insertarse y fortalecer los procesos **Creatividad Social Alternativa** que emergen en todos los ámbitos de la sociedad a partir de la crisis planetaria (de la sociedad global).

La Maestría en Estudios Transdisciplinarios para la Sostenibilidad que fue creada en 2008 –

poco antes de la fundación del Centro- constituye un cimiento desde donde hemos venido generando una **propuesta de eco-formación transdisciplinaria**.

Desde esta cimiento, en 2013 creamos el Programa de Doctorado en Estudios Transdisciplinarios (PhD), el cual está dirigido a la formación de investigadores que desde cualquier área del conocimiento puedan ejercer procesos creativos de investigación científica, humanista, artística y social. A partir de este programa de posgrado pretendemos extender esta propuesta educativa a los

diversos países de Latinoamérica, con la finalidad de fortalecer las iniciativas innovadoras en el campo de la educación universitaria en la región.

JCR: ¿Cuáles son las lecciones aprendidas en los diálogos entre las tradiciones populares y la cosmología antigua de las filosofías mesoamericanas? ¿Qué significa la sostenibilidad desde esta cosmovisión?

CNM: Recobrar la conciencia de ser parte de nuestra Madre Tierra nos hace re-encontrarnos ante nosotros mismos como Sujetos y ser capaces de actuar con respeto, agradecimiento y humildad. Son éstos los valores fundamentales que subyacen a una noción sustentable del Buen Vivir presentes en la sabiduría de la cultura ancestral de nuestros pueblos originarios, en Mesoamérica, en la región Andina, en Sudamérica y en todos los pueblos que han habitado la Tierra desde tiempos remotos.

JCR: ¿Hay alguna similitud con otras creencias ancestrales milenarias, como por ejemplo el Budismo, el Hinduismo, el Taoísmo o el pensamiento chinés?

CNM: Hay muchas similitudes de la filosofía ancestral mesoamericana con las filosofías ancestrales de otros pueblos. La no fragmentación de la realidad, es una de las similitudes con otras filosofías; la aceptación del principio básico de complementariedad y de coexistencia de los opuestos, el ying, el yang, el principio femenino y el masculino, coexistiendo para crear la vida y la armonía.



Docentes e investigadores del Centro de EcoAlfabetización y Diálogo de Saberes en Cantona

JCR: Como otros autores intelectuales, tu defiendes la **metodología transdisciplinar propuesta por el Profesor Doctor Basarab Nicolescu**, como un camino fértil para comprender los retos actuales de la sociedad-mundo. Pero todos sabemos cuan difícil es aplicar dicha perspectiva en el currículo. En el caso de tu institución educativa, ¿cómo consiguieron integrar alternativas en la construcción del conocimiento que van más allá del racionalismo y la ciencia moderna?

CNM: La propuesta educativa que estamos desarrollando desde hace casi 10 años se basa en tres fuentes fundamentales: (a) el **Pensamiento Complejo y la Educación para una Era Planetaria de Edgar Morin**, (b) la Filosofía Ancestral Mesoamericana y (3) la **Transdisciplinariedad y la propuesta de la Cosmodernidad de Basarab Nicolescu**.

A partir de éstas fuentes de la filosofía y de la ciencia, nuestra propuesta busca conectar las ciencias de la vida con lo social, lo político y lo cultural justamente con el propósito de ir más allá de la fragmentación del conocimiento y de los seres humanos.

Los ejes a partir de los cuales hemos venido trabajando en los programas de posgrado son los siguientes:

- a) El proceso al que hemos llamado “**re-aprendizaje transdisciplinario**”, el cual está dirigido a generar la **ruptura epistemológica** necesaria para trascender el racionalismo y el reduccionismo de la ciencia hegemónica/convencional. Al mismo tiempo, por medio de la **educación somática y la ecopedagogía**, se genera una **apertura cognitiva del sujeto** necesaria para la comprensión profunda de la realidad, desde un proceso de autoconocimiento con conciencia crítica y diálogo reflexivo.
- b) La **eco-alfabetización**, que es una propuesta ecopedagógica, dirigida a **promover el cuidado esencial hacia el entorno natural y social** en el que habitamos, **generando una conciencia participativa** desde la conexión básica con la tierra, el cultivo de nuestros alimentos, la articulación con los saberes tradicionales de los pueblos ancestrales y el cultivo de valores humanos básicos como el respeto y la humildad.
- c) El **diálogo de saberes** que implica la **apertura hacia otras formas del conocimiento**, desde el arte, la filosofía, el humanismo y los saberes tradicionales, populares y ancestrales. Desde esta apertura hacia la pluralidad de saberes y formas de saber, se retroalimentan nuestros conocimientos científicos disciplinarios y se enriquece la perspectiva desde la cual podemos imaginar alternativas sostenibles de vida para cuidar nuestro planeta Tierra.
- d) La articulación del proceso de formación profesional con procesos concretos de **indagación participativa, intervención social o investigación acción participativa** que realizamos en contextos locales desde una perspectiva sistémica y bio-cultural. Los programas de investigación que llevamos a cabo en el Centro permiten y fomentan la incorporación de los estudiantes del posgrado en iniciativas de Investigación Acción Participativa concretas en distintos espacios locales de la bioregión donde habitamos.

JCR: Este año 2015 es el final del Decenio Internacional para la Acción “agua fuente de vida” 2005-2015. El agua es esencial para la vida. No existen seres vivos en el planeta Tierra que puedan sobrevivir sin ella. Pocos meses atrás, durante el “**la Conferencia Anual de la ONU-Agua en Zaragoza sobre Agua y Desarrollo Sostenible**” (15-17 Enero 2015) más de 300 participantes, entre los cuales había expertos de las agencias de las Naciones Unidas, representantes del sector privado, de organismos gubernamentales y organizaciones no gubernamentales dibujaron conclusiones sobre el “**Agua y el Desarrollo Sostenible**”. De acuerdo con el “**World Water Development Report**” de la ONU, para 2050, al menos una de cada cuatro personas vivirá en un país afectado por escasez crónica o recurrente de agua dulce... ¿Dirías que el abordaje biomimético podría integrarse con la transdisciplinariedad para crear nuevos modelos humanos en armonía con los ecosistemas de la naturaleza? ¿Cómo podría la **biomimesis** concientizar medioambientalmente a la emergente **ciudadanía mundial**?

CNM: La transdisciplinariedad no es solamente un enfoque diferente e innovador del conocimiento y de la ciencia, sino una necesidad para la apertura hacia la ciencia de frontera y la inclusión de los múltiples y diversos saberes. En este sentido esta metodología nos permite conectar e integrar los distintos niveles del conocimiento y de la realidad.

Desde esta perspectiva entonces es posible que los seres humanos podamos aprender de las formas de comportamiento de la naturaleza para generar alternativas sostenibles de vida en nuestras sociedades. Particularmente entender los procesos sagrados de la naturaleza, que permiten que la vida se reproduzca en armonía y con gran respeto de la diversidad.

Para entender estos procesos sagrados de la naturaleza los seres humanos requerimos reintegrarnos como parte de ella. Recordar que somos parte de la naturaleza y que somos seres vivos.

JCR: En este sentido, ¿cuáles son los retos para la **Educación para la Ciudadanía Mundial propuesta por la UNESCO** para integrar hábitos sostenibles que nos permitan vivir en armonía con todos los sistemas vivos de la Madre Tierra?

CNM: Considero que la UNESCO enfrenta muchos desafíos para desarrollar su propuesta de Educación para la Ciudadanía Global. Uno de los más importantes desafíos es el de conectar procesos y problemáticas locales con sus propuestas globales. La crisis planetaria se expresa concretamente en **espacios glocales**. Entender las particularidades de estos espacios, crear programas educativos pertinentes y conectar con las alternativas globales que respondan a las necesidades reales de poblaciones locales me parece un gran desafío.

JCR: Como la EcoAlfabetización incluye todo nuestro sistema de creencias, valores, actitudes, costumbres, instituciones y relaciones sociales, constituye el modo en que percibimos la sociedad-mundo y cómo la especie humana interactúa con el planeta. Estamos empezando a entender el impacto de nuestras acciones individuales y colectivas entre nosotros mismos, pero también con la biosfera como un todo. ¿Cómo podríamos desarrollar diálogos ecoalfabetizadores para promover una “**consciencia cosmoderna**” que empodere a los jóvenes para sentirse parte del cosmos? ¿Qué es necesario para interconectar los problemas globales con la responsabilidad individual?

CNM: Estoy de acuerdo, despertar la conciencia de la responsabilidad individual frente a nuestras acciones y comprender que todos nuestros actos afectan a niveles globales es algo fundamental que hay que transmitir y generar en la población joven.

Los jóvenes de las sociedades actuales de hecho están buscando estas conexiones a través de diversas formas. Sin embargo, es necesario que desde las instituciones educativas seamos capaces de proporcionar espacios donde la creatividad social alternativa que se está generando cotidianamente en la sociedad -casi de manera espontánea- sea contenida, y fortalecida para potenciar sus capacidades creativas.

La Transdisciplinariedad es una herramienta educativa muy ponderosa para despertar la conciencia ecológica, para recordarnos que somos parte del todo, para generar una **conciencia cosmoderna**, que implica justamente el sentirnos partícipes de lo que acontece. Al reconocer la co-existencia de distintos niveles de Realidad y de Percepción, la Transdisciplinariedad conecta los niveles físico, mental, emocional y espiritual, y de esta manera permite que seamos capaces de ir más allá de nuestros propios condicionamientos culturales hacia una postura transcultural que nos permita comunicarnos y generar un verdadero diálogo creativo con la naturaleza y entre los seres humanos.

JCR: Sin ninguna duda, quería preguntarte por los **Objetivos de Desarrollo Sostenible** propuestos por las Naciones Unidas para 2030. Por primera vez en la historia de la humanidad conocida, muchos países han firmado acuerdos para trabajar juntos bajo las mismas premisas. Al final de los **Objetivos de Desarrollo del Milenio** vemos que todavía hay muchas cosas que hacer ante los retos universales. ¿Cuál piensas que debería ser hecho para empezar un cambio radicar entre nuestros líderes y políticos? ¿Cuál es el papel de los educadores y de las instituciones?

CNM: Considero que la situación del mundo actual es dramática: marginación, desempleo, depresión masiva, contaminación, pandemias de todo tipo, guerra.

En este contexto los líderes políticos tendrían que comprometerse con propósitos de paz y de cuidado del medio ambiente a nivel planetario.

Las instituciones educativas y los educadores tenemos un rol fundamental para generar conciencia y ciudadanía. Es decir, generar procesos de empoderamiento y autonomía en las sociedades locales, que permitan a las poblaciones la capacidad de apropiarse y cuidar sus territorios. De fortalecer sus procesos identitarios e imaginar horizontes de futuros sustentables para sus sociedades.

JCR: Entonces pensaré seriamente sobre tu invitación de estudiar mi post-doctorado en Veracruz. Definitivamente, quiero visitar su centro para tener experiencias somáticas en mi propio cuerpo-ser. ¿Hay algún congreso que deberíamos atender en 2015? ¿Dónde podrían nuestros lectores y lectoras conocer más sobre las actividades de su centro?

CNM: ¡Que buena noticia Javier! Será excelente para nuestro Centro contar con tu presencia realizando una Estancia de Investigación de Posdoctorado. ¡Me complace mucho saber que te

interesa contribuir con el Centro EcoDiálogo de la Universidad Veracruzana en México!

Con tú presencia aquí desarrollando actividades de docencia y de investigación podrías nutrir nuestro trabajo y a la vez retroalimentar tu propuesta de una Educación para la Ciudadanía Global dirigida al Desarrollo Sustentable, justamente a través de integrarte a nuestros procesos de ReAprendizaje Transdisciplinario y nutrir nuestras iniciativas de investigación acción transdisciplinaria en los distintos espacios sociales donde estamos trabajando con la sociedad civil de nuestra bioregión.

Algunas ligas para saber más acerca de nuestro trabajo son las siguientes:

<https://www.youtube.com/watch?v=O4E7h8A6sfQ>

www.uv.mx/mets

<http://www.uv.mx/detransdisciplinarios/>

www.uv.mx/ecodialogo

JCR: Gracias Cristina, estoy seguro que sería una experiencia muy provechosa y voy a intentarlo sin duda. Antes de despedirnos, ¿hay algo que te gustaría decir con motivo del **Día Mundial del Agua**? ¿Cómo podrían nuestros lectores y lectoras ayudar en este proceso de metamorfosis ecoalfabetizadora?

CNM: Considero que es muy importante expandir nuestra conciencia sobre el cuidado de nuestro Planeta Tierra. Generar una conciencia de co-responsabilidad en relación con nuestras acciones como individuos y como colectividades y gobiernos; fomentar la conciencia de que nuestras acciones tanto en los entornos cercanos y como en los lugares más alejados, tiene repercusiones en todo el planeta. Recuperar la conciencia y el conocimiento que tienen los pueblos ancestrales de que el agua es un ser vivo que merece nuestro respeto y cuidado. Requerimos aprender las lecciones de la **biomimesis** del agua para generar formas sustentables de vida.

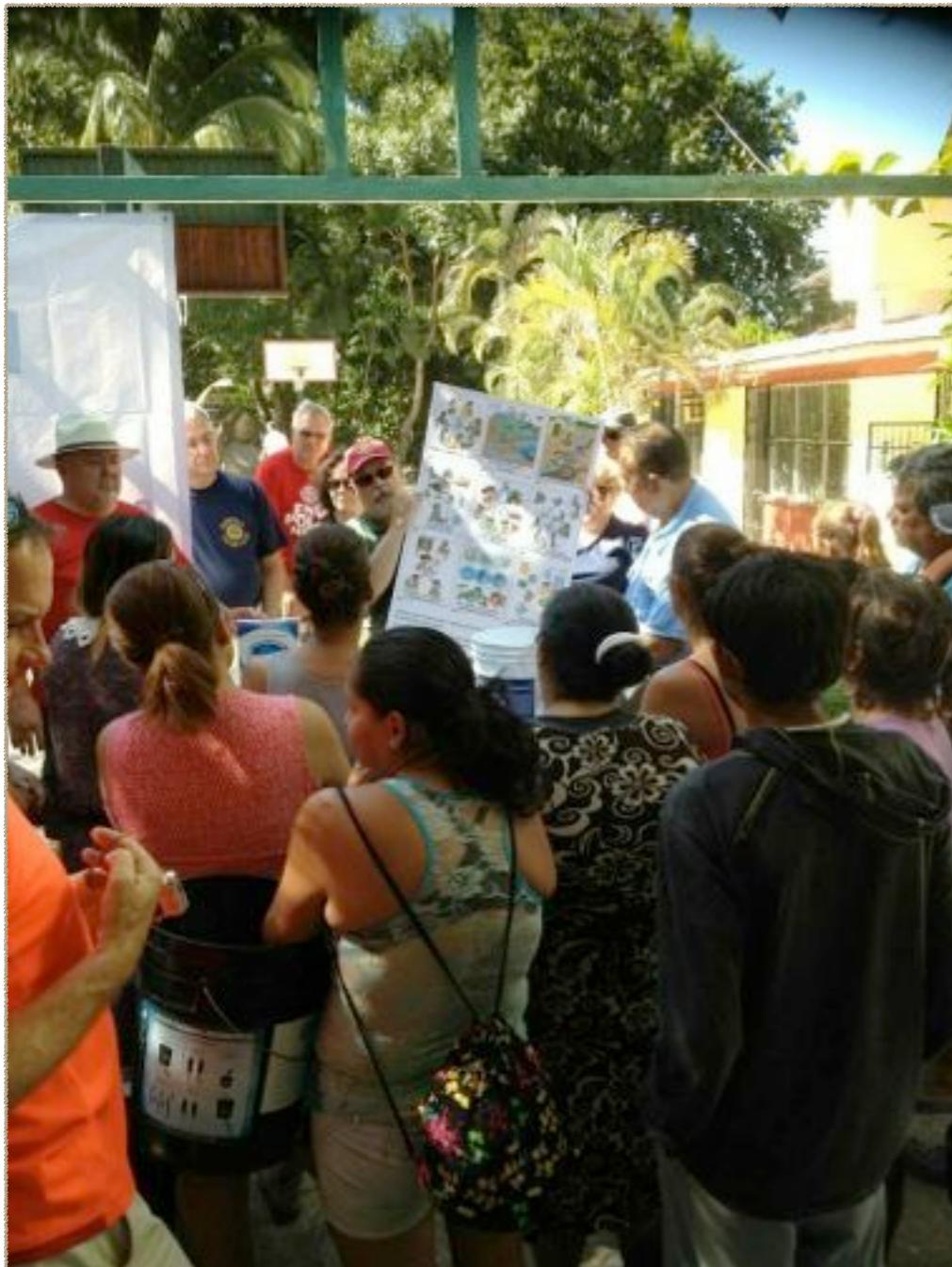
Y algo fundamental, **generar procesos comunitarios, locales-regionales de apropiación y cuidado del agua**. Esto es urgente y para ello las instituciones educativas en los diversos niveles tienen un papel muy importante ya que alrededor de las escuelas se congregan las familias, tanto en los entornos rurales como en los urbanos y periurbanos.

Actualmente en México –como en todo el mundo- **los ciudadanos estamos luchando por mantener la soberanía del agua**. Las grandes empresas multinacionales aliadas con el gobierno ilegítimo y corrupto de nuestro país, tienen la intención de apropiarse del agua para intereses privados de enriquecimiento capitalista, y esto es muy peligroso para las poblaciones locales, ya que estas empresas, muchas de ellas mineras, utilizan el agua para la explotación de las minas y generan procesos de contaminación muy graves que tienen implicaciones sobre territorios de grandes extensiones afectando a poblaciones rurales y urbanas en varias regiones del país.

JCR: Muchísimas gracias de nuevo Cristina por tu tiempo e inspiración. ¡Espero verte de nuevo pronto para intercambiar más ideas y reflexiones!

La journée de l'eau potable entre les mains d'enfants

[Read English version here](#)



Enzo est un petit garçon vif, qui aime fourrer son nez partout et apprendre en grandissant.

Enzo visite notre monde et découvre souvent les tragédies qui frappent notre terre. Nous croisons des enfants malades causés par l'eau polluée. Ces mêmes enfants et leurs parents ne savent pas comment utiliser l'eau et nous devrions prendre quelques instants de notre vie pour les éduquer sur quelques gestes simples.

Plusieurs associations ou fondations se réunissent pour aider les plus défavorisés et apprennent ensemble les moyens pour bien utiliser l'eau potable.

Enzo participe un jour à cette prise de conscience, que tout passe par les gestes quotidiens et entre les mains des enfants d'aujourd'hui. Ce sont ces mêmes enfants fiers de leur apprentissage qui guide leur aîné vers les bons gestes à accomplir pour éviter tout accident d'empoisonnement.

La production d'eau potable correspond à l'action permettant de produire de l'eau potable à partir des eaux naturelles. Le traitement nécessaire dépend fortement de la qualité de la ressource. Il varie aussi avec le niveau d'exigence et les normes appliquées et différentes suivant les pays. Nous savons tous, dans les pays comme l'Afrique, ou le Mexique et d'autres encore, l'eau de leur source n'est pas potable.

Lors d'un voyage en janvier de cette année, Enzo et ses parents rendent visite aux enfants d'une école. Ils reçoivent des seaux et des filtres pour un remplissage d'eau propre, venu du Canada. C'est un début, un commencement dans le village. Les associations souhaiteraient bien sûr que tous les villages puissent être équipés d'eau potable, un seau dans chaque famille. Mais, malheureusement l'investissement d'un tel matériel dépasse nos bonnes volontés. Les enfants sont les adultes de demain, nous devons les instruire sur les nouvelles techniques à employés et leur prise de conscience sur les dangers de l'eau pol-

luée. Et pas seulement, il faut plus d'aide pour accomplir de tels événements autour des écoles, plus de mains et plus d'investissements.

Enzo si petit qu'il soit, sait déjà que demain sera un jour nouveau pour ses amis. Ils apprennent chaque jour, à vivre mieux, ensemble et souder. Chaque pas effectué doit amener un autre pas vers le futur en évitant de reculer.

C'est pendant une matinée entre les rires, de chamailleries et de complicité que nous donnons quelques instructions et quelques heures d'explications pour bien utiliser les seaux et les filtres. Cela permettra aux habitants d'un petit village de se servir quotidiennement de l'eau potable et cette même eau est à consommer avec modération. Il ne faut pas oublier de l'économiser, l'eau potable doit être servie pour un usage alimentaire seulement !

L'eau est passée à travers un filtre qui intercepte les petites particules. Petites sont les mailles du filtre, plus petite doit être une particule pour passer. La filtration peut être accomplie comme traitement tertiaire d'une eau brute, comme traitement secondaire d'une eau usée ou comme unique traitement si l'on parle d'une filtration transmembranaire. Les filtres les plus communs dans les stations de traitement d'eau sont les filtres au sable et à l'anthracite. Les filtres s'assurent que l'eau qui en sort respecte les normes en vigueur en ce qui concerne la turbidité. Les virus et bactéries peuvent toutefois passer au travers des filtres, c'est pourquoi l'étape finale de désinfection est obligatoire.

Chaque enfant en file indienne reçoit un seau et un filtre accompagné de gestes simples à effectuer chaque jour.

C'est avec le sourire qu'Enzo se glisse entre les jambes d'enfants et écoute attentivement les derniers conseils pour bien utiliser le matériel.

C'est avec grand espoir que nous espérons tous, que chaque village puisse être à leur tour en paix avec l'eau de leur source.



by Sonia Colasse

Children Bilingual Manager and author the children bilingual book: "The Adventures of Enzo"

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International Youth Day

August 12

Submission Deadline July 5



Organización
de las Naciones Unidas
para la Educación,
la Ciencia y la Cultura

Con el apoyo de la
Oficina de
Santiago



Millennium Development Goals Section

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EL AGUA ES VIDA

**Araceli Lozano Pulido**

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EL FUTURO EMBOTELLADO: Agua y Seguridad para el Tercer Mundo

**Olenka Ochoa Berreteaga**

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HOW TO ELIMINATE THE WARS IN OUR PLANET

**Fernando Alcoforado**

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PROTECTION CHALLENGES FACING RWANDAN REFUGEES IN SOUTH AFRICA

**Callixte Kavuro**

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EL AGUA ES VIDA

Resumen: El agua es fuente de vida. Así reza el lema del Decenio Internacional para la Acción de Naciones Unidas, cuyo objetivo fundamental es el de promover los esfuerzos para cumplir los compromisos adquiridos en materia de agua y saneamiento para 2015: Los Objetivos de Desarrollo del Milenio (ODM). A pesar de no existir un objetivo específico sobre Agua y Saneamiento, sí se incluía una meta que hacía referencia a la reducción a la mitad de la población sin acceso al agua potable y a saneamiento mejorado. Si bien a nivel global se ha alcanzado la meta relativa al acceso al agua, el incremento de la cobertura ha sido muy desigual. Sin embargo la meta en materia de saneamiento no se han conseguido. Además, el análisis de la cobertura como indicador del derecho humano al agua se muestra inadecuado. La mera existencia de instalaciones de abastecimiento no garantiza aspectos como la calidad, la frecuencia del servicio, la asequibilidad económica, la sostenibilidad, la participación o la no discriminación. El agua y el saneamiento satisfacen muchas de nuestras necesidades de ser, tener, hacer y estar. Por ello en este artículo, tras presentar los datos de los ODM y los eventos destacados ocurridos durante este decenio, recopilaremos las lecciones aprendidas enriquecidas por la experiencia de ONGAWA. Además, estamos en un importante escenario al que no se le ha prestado la suficiente atención: el cambio climático. Las confluencias con esta imminente realidad nos permitirán (esperemos) tanto crear conciencia como afianzar aprendizajes; y éstos generan acción. Y es mediante la acción que se identifican oportunidades, catalizan los procesos, y se abren nuevas líneas de trabajo que multiplican los logros. Por ello, en el marco post 2015 se precisan nuevos y más ambiciosos compromisos para desarrollar acciones centradas y coherentes con el derecho humano al agua y saneamiento y el desarrollo sostenible.

Palabras clave: derecho humano, agua, saneamiento, ODS, ODM, desarrollo humano, pobreza



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WATER IS LIFE

Abstract: Water is the source of life. It is the motto of the UN International Decade for Action, whose main objective is to promote efforts to meet commitments on water and sanitation: The Millennium Development Goals (MDGs). Despite the absence of a specific target on Water and Sanitation, there was a goal that referred to halve the population without access to safe water and improved sanitation. While globally the target on access to water has been reached, increasing coverage has been uneven. However targets on sanitation have not been achieved. But the analysis of coverage as indicator of the human right to water is shown inadequate. The only existence of facilities is not guarantee of aspects as quality, service frequency, affordability, service sustainability, participation or non-discrimination. Because many of our needs be, have, and do are satisfied with water and sanitation. Therefore in this paper, after the presentation of the data of the MDGs and highlights events during this decade, lessons learned are collected and enriched by the experience of ONGAWA. But we are in an important scenario that has not been given enough attention: Global Climate Change. The confluences with this impending reality allow us (hopefully) raise awareness and reinforce learning. Because they generate action. It is through action that opportunities are identified, processes are catalyzed, and new working lines multiplies the open achievements. Therefore, in the post 2015 framework is needed new and more ambitious commitments to develop actions with the human right to water and sanitation and sustainable development.

Keywords: human right, water, sanitation, SDG, MDG, human development, poverty

INTRODUCCIÓN

En Septiembre de 2000, 189 estados miembros de las NN.UU. aprobaron la Declaración del Milenio. Pero no eran solo palabras. Se trataba de un compromiso con un calendario y unos objetivos de progreso reales y medibles con los que los dirigentes comprometieron a sus países para reducir los niveles globales de pobreza. Los **Objetivos de Desarrollo del Milenio** (en adelante, ODM), que a través de diversas metas e indicadores, pretendían abordar los principales aspectos del desarrollo.

Dentro del objetivo número 7, garantizar la sostenibilidad del medio ambiente, se incluye la meta 7.c: reducción a la mitad de las personas sin acceso sostenible al agua potable y a servicios básicos de saneamiento.

Dada la magnitud de la tarea, en Diciembre de 2003 se proclamó el período 2005-2015 como **Decenio Internacional para la Acción: “Agua, fuente de vida”**. El decenio comienza el día 22 de marzo con el Día Mundial del Agua.

El reto de este Decenio consistió en centrar la atención de políticas y actividades orientadas a la consecución de los ODM en Agua y Saneamiento (en adelante, A&S). A través de la unión y promoción de esfuerzos, se buscaba lograr los compromisos de todos los actores que sirvieran para garantizar y alcanzar dichos objetivos.

El período de los ODM está finalizando con resultados satisfactorios en materia de **abastecimiento**. Pero si bien a nivel global se ha alcanzado la meta relativa al acceso al agua, todavía son 748 millones las personas que no tienen todavía acceso a fuentes mejoradas de agua potable, que son aquéllas que por la naturaleza de su construcción o a través de una intervención activa están protegidas de la contaminación externa, en particular, de la contaminación fecal. Estas instalaciones pueden ser agua entubada, grifos públicos, pozo excavado o manantial protegido.

El suministro de agua potable sigue siendo un desafío en muchas regiones porque el incremento de la cobertura del agua ha sido muy desigual. Si desagregamos los datos vemos que en el ámbito rural dicha meta sigue sin alcanzarse, y que en numerosos países sus resultados parecen estancarse, principalmente en África Subsahariana.

Por otro lado, la meta en materia de **saneamiento** no se ha conseguido; se requería que un 75% del planeta tuviera acceso al saneamiento mejorado, es decir, a instalaciones que separen de forma higiénica las excretas del contacto humano, como un inodoro con descarga hidráulica, letrina de pozo mejorada con ventilación, letrina de pozo con losa o letrina/inodoro de compostaje. En la actualidad son más de 2500 millones de personas las que siguen sin acceso a instalaciones mejoradas de saneamiento y 1000 millones las que se ven obligadas a practicar la defecación al aire libre. De ellas 7 de cada 10 personas viven en zonas rurales.

En África subsahariana el 70% de la población no dispone de saneamiento mejorado y un 25% todavía realiza la defecación al aire libre. En el Sur de Asia más de 1000 millones de personas carecen de acceso mejorado y más de 650 millones continúan practicando la defecación al aire libre. A pesar de ello, los avances realizados en algunos países indican que es posible realizar progresos y alcanzar objetivos perseguidos, siempre que exista un compromiso al respecto de la comunidad internacional.

EVENTOS DESTACADOS EN LA AGENDA INTERNACIONAL DURANTE ESTE DESENIO

En paralelo al desarrollo de los ODM, a lo largo del decenio del agua han tenido lugar diversos eventos clave a nivel internacional, enriqueciendo el escenario de la agenda del agua.

Fue en Julio de 2010 cuando la Asamblea de Naciones Unidas reconoció explícitamente el **Derecho Humano al Agua y Saneamiento**, reafirmando que ambos son esenciales para la realización de otros derechos humanos y para alcanzar el desarrollo y una vida humana digna, todo ello en coherencia con la Declaración Universal de Derechos Humanos (DUDH) aprobada en 1948 por la Asamblea General de Naciones Unidas. En ella se exhorta a los Estados miembros y Organizaciones Internacionales a respetar, proteger y cumplir el derecho humano relacionado con el A&S. Para ello se han de proporcionar recursos financieros, capacitación y transferencia de conocimiento y tecnología así como un marco legislativo que permita a los países en desarrollo proporcionar A&S de forma:

- Suficiente y continua para el uso personal y doméstico; conforme a la Organización Mundial de la Salud, son necesarios entre 50 y 100 litros de agua por persona y día.
- Saludable, libre de microrganismos y sustancias químicas y otros elementos que constituyan un peligro para la salud. Estos peligros pueden llegar a ser graves, estando relacionados con la transmisión de parásitos, virus y bacterias.
- Aceptable, presentando un color, olor y sabor adecuados. Los servicios deben ser culturalmente apropiados y sensibles al género y exigencias de privacidad.
- Accesible. El agua debe encontrarse a menos de 1000 metros del hogar y el tiempo de desplazamiento no debe superar los 30 minutos.
- Asequible para todos. El programa de NNUU para el desarrollo (PNUD) sugiere que el coste del agua no debería superar el 3% de los ingresos del hogar.

Pero existen tanto derechos como responsabilidades, y los Estados tienen la obligación de garantizar que las personas puedan acceder de forma efectiva a su derecho al agua y saneamiento. Para ayudar a los Estados y a las organizaciones públicas y privadas en la tarea de respetar y promover el derecho, en 2011 la Relatora de NN.UU. para el derecho humano al agua y saneamiento publicó una recopilación de buenas prácticas: "Derechos hacia el final. Buenas prácticas en la realización de los derechos a agua y saneamiento", y en 2014 un manual para la implementación de estos derechos.

Por último, conviene resaltar que a las dificultades para la implementación práctica del derecho al A&S se une otra preocupación de repercusión global, el cambio climático, que tiene una fuerte influencia sobre los recursos hídricos y, por tanto, sobre las posibilidades para hacer realidad universalmente el derecho al agua y saneamiento.

PROFUNDIZANDO EN LA IMPORTANCIA DEL AGUA EN EL DESARROLLO HUMANO

Este decenio ha contribuido a la concienciación sobre el agua y su problemática relacionada con el desarrollo humano. A continuación se presentan algunas claves que permiten entender la importancia del agua para el desarrollo humano y los problemas para las personas y los ecosistemas que pueden derivarse de una gestión inadecuada.

El agua es un elemento irremplazable en nuestro crecimiento como personas. Es **fuente de vida**, y es clave en el medio ambiente que nos acoge. El agua sacia nuestra sed y la de otros seres vivos, nos permite preparar los alimentos, la utilizamos para nuestra higiene y la limpieza doméstica, regamos para obtener alimentos, interviene en los procesos productivos siendo su impacto medible en forma de huella hídrica, es el medio de transporte de nuestros residuos gracias al saneamiento, conserva ecosistemas haciendo nuestro entorno habitable y más agradable...

Y para su cuidado como recurso es primordial tener conocimiento de los sistemas hídricos existentes y su recarga mediante el ciclo hidrológico. Con su **extracción desproporcionada** estamos alterando el equilibrio de este ciclo natural.

Actualmente utilizamos un 70% del agua extraída en la **agricultura y ganadería**. Pero la forma en que se gestiona ha provocado importantes cambios en los ecosistemas, alterándolos y contaminándolos por la utilización de abonos y pesticidas y sobre-explotando en muchos casos los acuíferos. Además, cada día comemos entre 2000 y 5000 litros de "agua virtual" embebida en la elaboración, transporte y comercialización de los alimentos. Por ejemplo, 100 gramos de vegetales consumen a lo largo de todo su ciclo de producción 20 litros de agua, mientras que 150 gr de carne consumen 2025 litros. Por tanto, el cambio de dieta y la modificación de patrones de consumo y producción que se está produciendo a

nivel internacional han supuesto un creciente impacto sobre el consumo de agua en los últimos 30 años. Y a esto hay que añadir las grandes cantidades de agua que se malgastan debido al riego ineficiente o a los alimentos que se tiran.

Por otro lado, el sector **doméstico, comercial y otros servicios** urbanos suponen el 10% del consumo de agua; en el caso del ámbito doméstico, ésta se destina, entre otros, al abastecimiento, higiene o preparación de alimentos. Pero una importante parte de la población mundial solo se provee del agua que es capaz de transportar debido a que las fuentes se encuentran alejadas, con dotaciones incluso menores de 10-20 litros/persona-día. A este respecto, la tarea de facilitar el suministro de agua es una carga doméstica de las que son principalmente responsables las mujeres y los niños y niñas, siendo una pesada carga que supone un importante desgaste para su salud pasando factura con los años y condicionando su futuro. Por tanto, conforme se reduce la distancia a las fuentes de suministro, el tiempo invertido en el transporte será menor y la provisión de agua abastecida será mayor.

Por último, la **industria y la energía** juntas representan el 20% restante de la demanda de agua, y el previsible incremento en 2035 del consumo de energía (+ 35%) hará que aumente el consumo de agua en un 85%.

Otro aspecto importante que vincula al agua y al desarrollo humano se produce en la generación de **aguas residuales**, como fuente potencial de contaminación del entorno. A este respecto cabe resaltar que entre un 65 y un 80% del agua utilizada es devuelta a los cuerpos receptores como agua residual, y solo el 20% de las aguas residuales generadas son tratadas. Estos vertidos acaban afectando tanto a los ecosistemas como a las personas.

El agua contaminada es transmisora de numerosas **enfermedades**: su consumo, el contacto con ella o la transmisión por vectores como moscas y mosquitos son los responsables, por ejemplo de 4000 millones de casos anuales de diarrea en el mundo, que causan la muerte de 1,8 millones de personas, siendo el 90% menor de 5 años. Asimismo, los rendimientos y productividad tanto de niños en la escuela como de adultos en su trabajo disminuyen a causa de las enfermedades asociadas al agua y saneamiento; por ejemplo, anualmente se pierden 443 millones de días escolares debido a enfermedades relacionadas con el agua insalubre.

Diversos estudios realizados demuestran que la manera en que se eliminan los excrementos humanos es determinante para la supervivencia infantil y determinarán su desarrollo futuro, libre de enfermedades. A este respecto, la transición de un sistema de **saneamiento** no mejorado a uno mejorado reduce la mortalidad infantil en una tercera parte. Por tanto, el agua de calidad y el saneamiento mejorado conlleva ventajas no solo para la salud personal, sino que incide en la salud pública, en los medios de vida y la dignidad de familias y comunidades.

En la actualidad, 1600 millones de personas viven en zonas ya afectadas por la escasez física de agua, donde el uso supera la recarga natural, y se prevé que para el año 2025 dos tercios de la población mundial vivan en zonas con estrés hídrico, provocado tanto por su escasez como por el deterioro de la calidad.

Esto contribuye, sumado a otros factores, a la migración desde **zonas rurales** a **zonas urbanas**, en búsqueda de mejores condiciones de vida, aunque en muchas ocasiones acaban habitando en **asentamientos informales** (tugurios, slums), con enormes deficiencias en el acceso al agua y saneamiento y a otros servicios básicos. En 2020 se prevé que 888 millones de personas vivan en tugurios, y en la actualidad el 62% de la población urbana de África Subsahariana y el 43% de la población urbana del sur y centro de Asia viven en este tipo de asentamientos.

Los residentes de estos barrios pagan mucho más por el agua que un ciudadano de zonas formales de la misma ciudad y que tenga conexión domiciliaria, ya que las instalaciones son insuficientes o inadecuadas y deben recurrir a proveedores privados, mucho más caros.

Como último aspecto de los abordados en este apartado en relación con la importancia del agua, se puede destacar que en el planeta existen 276 cuencas y 200 acuíferos transfronterizos, en los que las intervenciones a un lado de la frontera afectan al otro. Aunque las tensiones crecen donde el agua es escasa, es preciso destacar que la necesidad también une, y a nivel internacional los conflictos por el agua han constituido la excepción, no la regla. En los últimos 50 años, ha habido unos 37 casos de violencia entre Estados por causa del agua, frente a más de 200 tratados relativos a la misma.

En definitiva, durante este decenio del agua se ha visibilizado la importancia del agua en todos los ámbitos de nuestra vida, además de para el medio ambiente. Por todos los aspectos mencionados anteriormente, los enfoques fragmentados ya no resultan válidos para abordar el acceso universal al agua y saneamiento, y son necesarios enfoques holísticos donde factores como los cambios demográficos, movilidad y factores climáticos se tengan en cuenta y se relacionen con una gestión integrada de recursos hídricos, desde un enfoque de derechos humanos.

HACIA UN MAYOR COMPROMISO PARA ABORDAR LOS RETOS PENDIENTES

A lo largo de los apartados anteriores ha quedado patente que el A&S son vitales para la salud y el bienestar de las personas, resultando fundamental para el desarrollo socioeconómico y para unos ecosistemas saludables, y que, además, influyen fuertemente sobre otros derechos humanos como la salud, la educación o la alimentación.

En este ámbito, los Objetivos de Desarrollo del Milenio en A&S han conseguido, impulsados en parte durante la década del agua, grandes avances, aunque todavía existen enormes deficiencias, especialmente en el ámbito del saneamiento, que sigue siendo la asignatura pendiente, ya que durante las últimas décadas ha sido el agua la que ha centrado el interés muy por encima del saneamiento. Es cierto que trabajar en saneamiento es muchas veces más complejo y costoso, pero incluso económicamente tiene ventajas: cada dólar gastado en saneamiento supone un retorno de hasta 5,5 dólares.

Por otro lado, es preciso resaltar que avanzar en la cobertura de acceso al agua y saneamiento no es sinónimo de avanzar en la satisfacción del derecho humano a ambos elementos: son necesarias intervenciones que contemplen otros aspectos como la asequibilidad económica, la calidad del agua y de los servicios, la sostenibilidad o la participación ciudadana en la toma de decisiones.

Para ello, los aprendizajes recopilados durante estos años deben tenerse en cuenta para orientar las acciones post2015, y superar las grandes desigualdades en el acceso al A&S existentes por regiones (ámbito rural, asentamientos informales) y colectivos (bajos ingresos, mujeres, niños y niñas, etc.). Entre estos aprendizajes destacan elementos clave como el fortalecimiento institucional, la gestión integrada de los recursos hídricos, la colaboración multiactor o la participación ciudadana y la rendición de cuentas de las autoridades públicas.

Tras este decenio del agua que finaliza este año, es momento de impulsar la acción, cooperación y compromiso de todos los actores implicados en los retos pendientes en A&S, de forma coherente con el resto de Objetivos de Desarrollo Sostenible. Cada actor de la escena internacional debe asumir su responsabilidad.

Desde los gobiernos del norte es preciso incorporar las obligaciones que este derecho impone al Estado en las propias políticas de agua nacionales, e incorporarlo en la política exterior (cooperación al desarrollo, comercio, internacionalización de la empresa, etc.). Para los gobiernos en los países con déficit de acceso supone la adopción de planes nacionales efectivos, dotados con suficientes recursos, que permitan el cumplimiento progresivo del derecho humano al A&S, integrando en los mismos no solo la provisión de infraestructuras, sino todo el desarrollo institucional necesario para la gestión de los servicios respetando los principios del derecho, poniendo énfasis en la inclusión de los colectivos más vulnerables y en la promoción de la rendición de cuentas, y teniendo en cuenta el impacto ambiental.

Por su parte, desde las instituciones internacionales deben extraerse buenas prácticas, formular recomendaciones a los países para su implementación, vigilar el avance en el cumplimiento del derecho a través de sus instrumentos de control, y mantener vigente la atención internacional para su cumplimiento. Igualmente, deberán promover la conexión entre la agenda de desarrollo y la lucha contra el cambio climático.

También existe un papel desde el sector privado, que debe operar teniendo en cuenta las obligaciones derivadas del derecho humano al A&S en lo relativo a cobertura universal, no discriminación y sostenibilidad del servicio, entre otros.

Las organizaciones de la sociedad civil deben seguir colaborando en la promoción de ciudadanía activa comprometida con la solución de este problema, en el fortalecimiento de las instituciones de los países con escasos recursos, en la realización de proyectos demostrativos que sirvan de modelo para la definición de los planes de gran escala, en la mejora de la gestión y las políticas públicas, y, por supuesto, en la denuncia de las violaciones de los derechos de las personas de las afecciones a los recursos hídricos.

También la ciudadanía cobra un papel relevante por su influencia en las políticas y actuaciones de entidades públicas y privadas, así como porque a través de la problemática del agua pueden acercarse a otros problemas relacionados con la pobreza y su solución. Porque somos corresponsables de los impactos sociales y ambientales de las actividades antropogénicas que están relacionadas con el A&S, el cambio en nuestras actividades cotidianas y las exigencias en el cumplimiento de conductas responsables por parte de empresas y gobiernos puede ser un importante instrumento de presión. También el acceso a nuevos modelos de consumo y de relaciones internacionales supondría importantes impactos en el acceso al agua y saneamiento, y en el alivio de la pobreza en general.

El objetivo final debe ser estimular a la comunidad internacional para que se adopten los compromisos y la hoja de ruta necesaria para hacer realidad el acceso universal al agua y saneamiento, desde una perspectiva de derechos humanos y sin olvidarnos del cuidado integral de nuestro entorno.

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EL FUTURO EMBOTELLADO: Agua y Seguridad para el Tercer Mundo

Resumen

El derecho al agua, entendido como acceso a agua potable y segura a las fuentes de agua natural, está en grave peligro por intereses de las multinacionales y por un ideario que se expande globalmente. La vida, la salud de las personas, y los recursos naturales valen menos que los negocios y la rentabilidad de las inversiones. Desde esta demagogia depredora se trastoca la lógica común y la gente en vez de tener la posibilidad de tomar agua potable gratuita y desde los grifos de sus casas, se ve obligada a comprar agua en botellas. En nuestra primera visita al Africa, específicamente a Nairobi (Kenya) a las comunidades de barrios en extrema pobreza, nos dimos cuenta de la exacta dimensión de la tragedia global, y de allí el título del "FUTURO EMBOTELLADO".

Palabras clave: Agua segura y gratuita, derecho humano, agenda global.



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BOTTLING FUTURE: Water and Security in the Third World

Abstract:

The right to water, understood as access to safe drinking water from natural water sources, is in deep danger by corporate interests and for this ideology which is expanding globally. Life, health of people, and natural resources worth less than business and investment returns. From this predator demagoguery the common logic is changing and people, having the possibility of taking free drinking water from the taps of their homes, is forced to buy water in bottles. On our first visit to Africa, specifically in the slum communities of extreme poverty in Nairobi (Kenya), we realized the exact dimension of the global tragedy, and hence the title of "FUTURE BOTTLING".

Keywords: Free and secure water, human right, global agenda.

Dos sensaciones y dos imágenes nos recuerdan nuestra primera travesía en África. De las sensaciones, el intenso calor y por ende, la añoranza por tener siempre a la mano un “vasito” de agua.

De las segundas, nos queda en la retina, Matabele una famosa barriada pobre de Nairobi. A la hora del almuerzo en el local comunal, nos sirven botellas de gaseosa. Cerca de allí, vemos un grifo de agua, pero nos advierten que “no se nos ocurra usarlo!”. Otro día, recorremos Kimongo (una villa rural de horticultores en las afueras de la capital), estamos bajo el sol abrasador de la sabana africana, y nos ofrecen una botella de agua de marca para calmar la sed. Nos traen un poco de agua en un pequeño recipiente, sólo para asear nuestras manos antes de la exigua merienda, ofrecida por unos amables pobladores. En ambos lugares no hay agua potable, ni agua natural, menos instalaciones sanitarias. Son asentamientos pobres, más bien en extrema pobreza. En Matabele se juntan casitas de lata con edificios deteriorados, y corre un desagüe expuesto en el frontis de las casas. En Kimongo, mujeres y niños deben recorrer por lo menos cinco kilómetros diariamente para conseguir con las justas, unos cuantos litros de agua en dos bidones que pueden cargar en la espalda. En África no hay duda, el agua segura escasea, y encima con el calentamiento global hay un panorama persistente de sequía.

Estamos en Nairobi para participar, del 16 al 20 de abril, de la 21va Sesión del Concejo de Gobernadores de UN-Hábitat. Entre los temas claves del debate en torno a su plan quinquenal, está justamente el problema del agua. Dentro de ello, el eje del acceso, de la pureza, del buen manejo, en suma del agua segura para todos. Y en especial para los pobres y el Tercer Mundo, que ya parecen sinónimos.

Las cifras son alarmantes, según un estudio del UNICEF y de la World Health Organization, ya para el año 2000 se estimaba que un billón de personas no cuentan con acceso a agua segura.

Por otra parte, rescatando una revista americana del 2001, repasábamos una nota que en ese entonces nos parecía “economía ficción”. Uno de los directivos de la Coca Cola, anunciaba que estaba entre los planes de expansión de esa multinacional, desarrollar un sistema doméstico de distribución de la gaseosa, la

idea era simple, por el grifo de agua instalado en la cocina de las casas, saldría la famosa cola. El principal fundamento, era el alto consumo de estas sodas, que muchas veces es mayor que el consumo del agua. Y no les falta razón. En el Tercer Mundo donde el agua es escasa e insalubre en especial para las grandes mayorías pobres, la gente normalmente tiene como opción tomar las sodas o el agua envasada de marca, antes de arriesgarse con el agua que sale del grifo. Mientras en el primer mundo el consumo de agua limpia es una práctica cotidiana y un derecho en ejercicio, en el tercer mundo la tendencia es a los alimentos y el agua procesados, con los subsecuentes problemas para la salud que ello acarrea.

La problemática de la escasez y la dificultad de acceder a agua segura, adquiere una nueva arista si tomamos en cuenta que con los procesos de privatización de los

servicios del agua, ésta muchas veces se ha hecho más onerosa para las familias pobres, en especial las que compran el líquido elemento de camiones cisterna, o para sectores de medianos ingresos. Así en muchos países solo el gasto por consumo de agua significa por lo menos la mitad del presupuesto familiar mensual.

Paradójicamente, las multinacionales están intensificando sus inversiones en la búsqueda de fuentes de agua natural y pura, donde está más disponible, es decir



en África y América Latina. Obviamente, para luego embotellarlas y/o convertirlas en colas. En Angola menos de la mitad tiene acceso al agua, pero el Gobierno ha establecido tremendos contratos con una multinacional para exploración de fuentes de agua. En India, hay una campaña de manejo de agua "Match where its falls", sostenida por una multinacional. A estos esfuerzos globales por embotellar el agua, también se suman los empresariados nacionales.

El problema del acceso a agua segura sin embargo también tiene otras "fuentes" de conflicto. Suele haber tres actores que pugnan por acceso a agua segura, obviamente con diferentes poderes y peso político: la gran industria, la agricultura y las familias. En países como el Perú, hay también otras particularidades locales del conflicto por el agua. Están las comunidades campesinas andinas y nativas amazónicas, defendiendo sus fuentes de agua contra la intervención de alguna empresa, pero también contra el ánimo depredador del narcotráfico y sus socios locales. Hay también conflictos entre regiones, por ejemplo el protagonizado entre Huancavelica (ubicado en el trapecio andino pobre del país) e Ica (en plena costa desértica). En esta última, se vive un "boom agro-exportador" que ha agotado el agua del subsuelo y que se sostiene con el agua que le viene de los andes. Mientras en Ica hay una pujanza de la dinámica económica, en las alturas de Huancavelica la gente con las justas sobrevive.

Otra arista, es que el calentamiento y el cambio climático en el Perú, están derritiendo los nevados y secando lagunas naturales, con lo que se prevé una grave escasez del líquido elemento en especial para las grandes ciudades de la costa, entre ellas la capital.

El otro conflicto es a nivel global, recordemos que hay 300 cuencas fluviales y acuíferos subterráneos ubicados en fronteras compartidas. En el debate geopolítico, se viene afirmando que la guerra en el futuro no será por el petróleo, sino por el agua.



Los desafíos son inmensos y de diferente nivel de complejidad. Un primer paso es promover el manejo eficiente del recurso agua para que llegue a todos los hogares. En la región latinoamericana y en el Tercer Mundo, se juntan ejes críticos como el consumo comercial, conexiones ilegales, falta de mantenimiento, es decir agua que se pierde, en un contexto marcado por la insalubridad y falta de acceso. Dos ejemplos de buenas prácticas a tomar en cuenta, es Singapur que en seis años redujo las pérdidas por fugas del 10 al 6 %, y segundo, USA que de los 80 a los 90 ha bajado su consumo, en especial el uso de agua por hectárea en un 16%.

Otro reto es reducir la polución de las fuentes de agua producto de los desechos industriales, mejorar el tratamiento y distribución para un acceso universal, así como mejorar la salubridad y potabilidad del agua para que las personas la consuman con seguridad.

Para la comunidad internacional y UN-Hábitat, es claro que el tema del agua, forma parte de una plataforma global por garantizar un entorno humano saludable, lo que supone una universalidad en la distribución, en el acceso, y sobre todo en la calidad.

No debemos resignarnos a tomar agua embotellada, o en su defecto una soda. Recordemos que el agua es un recurso natural y un bien público, por lo tanto hay un sentido de justicia en la gratuidad, en su acceso, sobre todo para los que no pueden pagar por ella, y el "agua segura" es un derecho humano. Por lo demás, prevalece un argumento ético, que nos obliga a preguntarnos si es moral que la gente en África y América padezca sed, y aun en la pobreza deba gastar parte de su presupuesto familiar en comprar agua de marca.

Un mínimo vital es consumir un litro de agua diario por persona, garanticemos entonces que cada hogar acceda a ello, y que ese litro traiga salud y bienestar a las personas, no enfermedad, ni negocios bajo la manga.

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HOW TO ELIMINATE THE WARS IN OUR PLANET

Abstract

This article aims to demonstrate that current international relations governed by the law of the strongest necessarily have to be governed in the future for a world government that is able to preserve world peace, defend the general interests of the planet making them compatible with the interests of every nation, mediate international conflicts and build consensus among all national states.

Keywords: International relations. War and peace among nations. World government.



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COMO ELIMINAR AS GUERRAS EM NOSSO PLANETA

Resumo

Este artigo tem por objetivo demonstrar que as relações internacionais atuais regidas pela lei do mais forte têm que necessariamente ser regidas no futuro por um governo mundial que seja capaz de preservar a paz mundial, defender os interesses gerais do planeta compatibilizando-os com os interesses de cada nação, mediar os conflitos internacionais e construir o consenso entre todos os Estados nacionais.

Palavras chaves: Relações internacionais. Guerra e paz entre as nações. Governo mundial.

1. Introduction

The current world situation is dramatic. Humanity feels overwhelmed by the major powers in the service of monopoly groups that command their economies and that do everything to defend their interests, disregarding laws, cultures, traditions and religions. Invasions in peripheral countries, openly or surreptitiously, with unconvincing arguments are part of the daily life of the great powers in their incessant search for world power even if they have to disregard domestic laws and international treaties. What will be the end of our world, of our lives, if the world today has become an unmanageable chaos in which humans beings only think about power and wealth and destroy nature? Can a man be called the Wight most intelligent of the Earth? A Wight intelligent would preach war and jeopardize their future and of their descendants? It's what they do today with our world, destroy for money, kill for wealth and power, the lives no longer worth anything, nothing has value, all for power and wealth!

World history is largely a history of wars, because we live in the States born of conquest, civil wars or struggles for independence. The earliest historical records that are known already speak of wars and struggles. It isn't, therefore, to cause astonishment that now, at the time of collecting all the bad actions generated by mankind, the number of wars and revolutions grow on an unprecedented scale, both in quantity and intensity. The violence of the conflict in our time has no parallel in history. The wars of the twentieth century were "total wars" against combatants and civilians without discrimination. The twentieth century was without doubt the most murderous of which we have record, both in scale, frequency and length of the war as well as the large number of human catastrophes it produced, from the greatest famines in history to systematic genocide. All "mega deaths" that have occurred since 1914 reached a total of 187 million dead. Since the end of World War II the world has known 160 wars when died about 7 million soldiers and 30 million civilians.

Wars are still part of our daily lives as shown by the conflict between Russia and Ukraine makes evident the purpose of the Western powers (United States and European Union), together with Ukraine, to weaken Russia's geopolitical position that seeks to regain global role before exercised by the former Soviet Union. Insoluble Palestinian question, which has existed since the end of the 1st World War when the victorious powers contributed to the occupation of Palestine by the Jewish people and facilitated the creation of the State of Israel at the expense of the Palestinian people, makes the Palestinian and Jewish people to live at permanent war. The recent military intervention in Iraq, Afghanistan, Syria and Libya complete the picture of conflict in the Middle East.

In addition to the aforementioned conflicts, humanity is faced with two major threats. One of an economic nature, is represented by the general crisis of the world capitalist system that tends to lead the world economy to depression with the failure of governments, the crash of companies, mass unemployment and even the outbreak of civil wars and new world

conflagration as has happened in the twentieth century with the 1st and the 2nd World War. Another threat, environmental, is represented by the depletion of natural resources of the planet, the overcrowded cities and the catastrophic global climate change, which tends to produce a serious impact on economic activities and increased social problems of humanity. Now is the hour of humanity to acquire the urgently as possible tools necessary to take control of your destiny and implement democratic governance in the world.

2. Kant and perpetual peace

How to build a new scenario of peace and cooperation between nations and peoples of the world? This is an old challenge and thought by many philosophers such as Immanuel Kant (1799) to address this issue in his work *A paz perpétua (Perpetual Peace)*. In 1795, Kant launched this opuscule which had great success with the public worship of his time. It was a project which aimed to establish a perpetual peace between the peoples of Europe, and then spread it all over the world. It was an Enlightenment manifesto in favor of permanent understanding among men. The main objective of Kant was to eliminate war that has always been seen by him as something that prevented humanity's efforts towards a decent future for humans. How to accomplish this?

Kant proposes in *Perpetual Peace* the foundations and principles necessary for a free federation of states legally established which would not adopt the form of a world state, because it would result, in his opinion, on an unlimited absolutism. Kant defended this thesis because there shouldn't be a sovereign power above the national states to interfere in its internal affairs. Kant proposes the existence of a federation of free states in which all state would have republican constitutions. The ultimate goal of this federation of states would be, according to Kant, the promotion of the supreme good, which is the true peace between states, ending the disastrous war, to which all states always turned their efforts throughout history as the main purpose.

Kant sought to end the "state of international nature" that characterized international relations so far. It should be noted that the term "state of nature" has been defined by the philosopher Thomas Hobbes (2014) in his work *Leviatā (Leviathan)*. According to Hobbes, in the "state of nature" dominates the absence of law, so there isn't justice. In this context, everyone seek to defend their rights by force. In the "state of nature", so as conceived by Hobbes, dominates the war of everyone against everyone. The state of nature is, therefore, the state of freedom without external law, that is, no one can be obliged to respect the rights of others also and cannot be sure that others will respect their rights and much less can be protected against acts of violence of others.

In practice, even after the Peace of Westphalia signed in 1648 that ended the disastrous Thirty Years War in Europe, international relations of Kant's time did not differ in fundamental current. Today, as then, we are experiencing the "state of the international nature" with the

worsening of the international political violence. Perpetual peace proposed by Kant was not put into practice because the precondition for their application is to overcome the real causes of political violence generating of wars and revolutions that have characterized the history of mankind. This means that there would be the need to overcome the root causes of violence, within each nation, with the elimination of disparities in wealth between the "top" and "bottom" in the social scale and at international level with the elimination of disparities in economic and social development between rich and poor nations, for one hand, and the dispute between the great powers for world power, on the other hand.

The achievement of perpetual peace could only happen if these contradictions were eliminated. Humanity must get aware that only will be possible eliminate political violence that leads to war of everyone against everyone in the national and international levels since the above contradictions disappear that still prevail in the world in which we live. Internationally, unlike what occurred in the past when the great powers were facing against other countries, whose differences, when they were not resolved through diplomacy, were resolved on the battlefield by successive wars, today is also facing independent terrorists organizations that proliferate mainly in the Middle East.

3. The need for a new legal superstructure and international policy to address contemporary terrorism

The substantial increase of terrorist organizations in the world at the present time makes in check the current interstate system resulting from the post-war in 1945 that demonstrates impotence in solving them. It should be noted that terrorism is used by organizations as a means to an end. Terrorism differs from guerrilla regarding the targets to be achieved in their actions. While the guerrillas choose military targets, enemy forces, their logistics, ammunition depots, terrorism seeks to achieve civilian and military targets indiscriminately. Terrorism does not seek selective attack, but the mass attack. According to François Geré (2012), a terrorist movement can, depending on the correlation of forces, use simultaneously or separately terrorism, guerrilla and conventional military operations provided they have sufficient capacity. This is the case of so-called Islamic State that has recently emerged in the Middle East.

Currently, terrorism reached large dimension in the Middle East with the rise of so-called Islamic State that aims to expand his caliphate throughout the Middle East, which characterizes itself by the *Sharia*, the Islamic Law interpreted from the Alcoran, establishing connections in Europe and other regions of the world in order to carry out attacks that may confer upon them authority through terror. On August 29, 2014, the Sunni terrorist group Islamic State - which has also been termed as Islamic State in Iraq and Syria (EIIS) and Islamic State in Iraq and the Levant (EIIL) - also known by the acronym EI, announced that its leader, Abu A-Baghdadi, had self-proclaimed caliph of the region located to the northwest of Iraq and part of central Syria.

The history of the Islamic State terrorist group is related to the political crisis process that began in Iraq after the war started in 2003. As we know, the Iraq War took place two years after the terrorist attacks of September 11, 2001 in New York led by members of the Al-Qaeda organization, then led by Osama Bin Laden. Al-Qaeda had great performance space in Iraq and part of Syria. The Islamic State was born as an Al-Qaeda branch, based on the same principles of this organization. However, shares of EI were gradually more radical, even for Al-Qaeda standards, which caused the separation of the two terrorist organizations.

The emergence of terrorist organizations raises questions the current interstate system resulting from the post-war in 1945. This situation makes it becomes imperative to create a new legal superstructure and international policy to address these new issues. The fact that there isn't a new legal superstructure and international policy to address contemporary terrorism does not justify the government of a country like the United States also act outside the law, that is, outside of international law in force to take the law into their own hands as do terrorist organizations. Hannah Arendt (1970) states in his work *On Violence*, that the practice of violence as any action transforms the world, but the most probable change is the proliferation of a more violent world.

It should be noted that the US government would have a right and an obligation to hunt and capture Bin Laden, Al Qaeda leader, but without invading another sovereign country like Pakistan without their permission and killed Bin Laden without offering him right of defense. This type of procedure is similar to someone who does not believe in the justice of his country, decides to take justice into their own hands. It is permissible to imagine that with the use of intelligence and not of violence, it would be possible to defeat terrorism. One might ask how would the use of intelligence to defeat terrorism? In this case, the US government should seek to gain the support of the leaders of governments in the region and its population, acting proactively to promote the development of these countries, and provide them with technology to monitor and track terrorist organizations. According to the highest principles of civilization, the US government should forward Bin Laden and all the terrorists to be tried by the International Court in The Hague, as with the former president of Yugoslavia, Milosevic and others accused of crimes against humanity. Without the adoption of such a procedure, we will be jeopardizing the highest principles that should guide the civilized life doing prevail the "state of international nature," that is, the "war of everybody against everybody."

Why are there wars and terrorism? Will be war and terrorism consequence of social and economic pressures that influence the lives of human beings organized in society or will result only in a natural aggressiveness to man, installed at the heart of something to call "human nature"? . For some scholars, the cruelty of economic systems, the wars, and the domination of man by man would be no more than a reflection of the most fundamental characteristics of man as a species: wild instincts, aggressiveness as an engine for development, laziness and the indulgence as maintenance factors of domination of the weak by the strong. But if we come to

the conclusion that man is not a wolf to man, that man does not kill and does not overwhelm the other for pleasure or instinctive compulsion, the way will be open to the demand for other types of societies that allow humans live in a way different from what occurs nowadays.

Rousseau has as its central idea the conviction of the natural goodness of man and that society is that degenerates man throwing him against his fellow man. Marx says that man is the architect of their own development and that human beings are capable of changing the world around them and in doing so, change themselves. In short, it is quite clear that the existence of a world based on social justice and cooperation among all human beings contribute to the existence of a constructive behavior that can change the world where we live in and, in doing so, change the humans beings themselves. This is the way to combat the violence that increasingly contributes to the social disintegration of the world in which we live.

4. War and peace among nations throughout history

Peace has been defined as the absence of war. The formula of Clausewitz (2010), the war as a continuation of politics by other means, is replaced today by the inverse formula: politics becomes the continuation of war by other means. Historically, peace among nations occurred in the following situations: the domain for an empire, the balance between the major powers and the hegemony exercised by a great power. The empire happens when an imperial state holds the monopoly of violence causing the other powers, particularly the subaltern, lose their autonomy and disappear as a political decision centers. The equilibrium state occurs when no great power impinge on the other. The hegemony of power happens when there is acceptance of his leadership by other nations.

The best example is the empire that was exercised by the Roman Empire (27 BC to 476 AD) and the United Kingdom from 1815 to the late nineteenth century in the world after defeating the army of Napoleon at Waterloo. Until the outbreak of the 1st World War, Britain was the dominant empire in the world. Unsatisfied by this situation Germany clashed with England and France for the redivision of the world. The main forms of military tactics used in the First World War were trench warfare or war of position, which was engaged in the protection of conquered territories and the war of movement, or forward positions, which was more offensive and had heavy weapons and equipped infantry.

During the 1st World War, the use of new weapons, improved by the industry, combined with new inventions like the airplane and the tanks, gave fighting a characteristic of impotence among the soldiers. Thousands of men died instantly in bombings or wrapped in huge clouds of toxic gas. It was decisive support of the United States to England and France towards the end of the war against Germany that was no longer the same force when the conflict began. With the end of the 1st World War in 1918, the United States amounted to the dominant economic power condition of the planet without, however, placing it as a great military power that only happened after the 2nd World War on the side of the Soviet Union.

Equilibrium situation between two great superpowers occurred in the twentieth century, from 1945, after the 2nd World War, until 1989, between the United States and the Soviet Union. The end of the bipolar world with the collapse of the Soviet Union in 1989 made to materialize the hegemonic situation exerted by the United States in the world that is threatened today by its economic weakness and the economic and military rise of China that has highlighted in the geopolitical world by great political influence, military and economic in the Asian and international scene thanks to the great extension of its territory (ranked third in territorial dimension on the planet), high number of inhabitants (about 1.3 billion, most populous in the world) and the dynamism of its economy (the economy is currently showing the highest growth rates on the planet). The unipolar moment of American hegemony unchallenged after the fall of the Berlin Wall is coming to an end.

In the contemporary era, the international geopolitical chess indicates the existence of three major players: the United States, China and Russia. From confrontation in the future between these three major military powers may result alternative scenarios to the current that is characterized at the time by the weakening of US hegemony on the world since the end of the bipolar world that confronted the United States and the Soviet Union. The XXI century is marking a qualitative change in the international system and the position occupied in it by the United States. From 2000, Russia will be strengthened through developing a strategic partnership with China that can help it in its resistance to the geopolitical ambitions of the United States both in Eastern Europe, the Caucasus or Central Asia. The Shanghai Cooperation Organization (Shanghai Cooperation Organization - SCO) established in 2001 an alliance between Russia and China of policy and military cooperation that is explicitly intended to be a counterweight to the United States and NATO military forces.

Note that the absence of war is not related to the approximate equality of forces that reigns among the great powers, preventing any of them, and any coalition of these units to impose their will. The approximate equality of status of forces between the great powers before the outbreak of the 1st and 2nd World War is proof that this did not prevent the onset of these conflicts. The domination of the British Empire did not prevent the outbreak of the 1st World War and the national liberation struggles of the peoples of the nations subject to its domain. The hegemony apparently looking absorb the nation states reduced to impotence, not abusing its hegemony, and respects the external forms of independence of states. The hegemony does not aspire to situation of empire. However, the hegemony currently exercised by the US is a poor way of maintaining world peace as evidenced by contemporary international geopolitical trends.

Given the impossibility of an imperial state power, powers in balance and a hegemonic power to ensure world peace, now is the time the humanity to acquire as urgently as possible instruments for the construction of world peace and the control of their destiny. To achieve these objectives, calls for the establishment of a democratic government in the world that

constitutes the only means of survival of the human species able to build a world in which every woman, every man of today and tomorrow have the same rights and the same duties, in which all forms of life and future generations are finally taken into account, in which all the sources of growth are used so ecologically and socially sustainable.

5. The construction of a new scenario of peace and cooperation between nations and peoples of the world

The preservation of peace is the first mission of every new form of world government. It would aim to defend the general interests of the planet making it compatible with the interests of each nation. The world government would also work as mediator in international conflicts and build consensus among all nation states, to make every national state respects the rights of its citizens, and seek to prevent the spread of global systemic risks. Actions to be a global governance was of Nations Covenant in 1815, the League of Nations in 1920 and of the United Nations in 1945 that were in vain because the great powers preferred to impose their will in international relations. Everything indicates that a world government should only occur in the future after the occurrence of major systemic disasters such as extreme ecological crisis, economic crisis of great magnitude, expansion of an economy of organized crime, the fall of a meteorite on the planet and the advancement of the terrorist movement.

Until the emergence of a world government, international relations will be governed by the law of the strongest. And this is the worst scenario because even the most powerful country would not be able to build world peace or solve the planet's problems. The economic crisis, financial, ecological, social, political and the development of current illegal and criminal activities show that they are insoluble without the existence of a world government. One must understand that the problems affecting the world economy and the global environment can only be resolved with the existence of a truly democratic world government representative of all the peoples of the world. International law cannot be applied and respected in the absence of a world government that is accepted by all countries and to ensure their governance.

Humanity must understand that it has everything to gain by joining around a democratic government in the world representative of all the people who operate above the interests of every nation, including the most powerful, managing the world in its entirety, in time and space. The new world order must be built to organize not only the relations between men on earth, but also their relationship with nature. It is necessary, therefore, that the drafting of a global social contract that provides for economic and social development and the rational use of resources of nature for the benefit of all mankind. The building of a new world order based on these principles is urgent. A world government is an imperative of survival of humanity.

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PROTECTION CHALLENGES FACING RWANDAN REFUGEES IN SOUTH AFRICA

Abstract:

On December 30, 2011, the UNHCR issued a formal statement declaring that Rwanda is a safe country for Rwandan refugees to return, thereby requesting their host countries to apply a cessation clause that would, among other things, render their refugee status revoked and eventually their refugee rights nullified. In its recommendation, the UNHCR stressed repatriation as the most favourable option over local integration and resettlement. This move was criticised by a number of human rights organisations due to the fact that there is an oppressive regime in Rwanda with a high record of human rights abuses. In this paper it is argued that the declaration simply served to add the general anxiety among Rwandan refugees who were and still are, like in many other countries, facing institutionalised exclusion in the socio-economic realm. The aim of the paper is to illustrate the protection challenges facing Rwandan refugees in South Africa and the manner in which an absence of formal declaration of South Africa's position on the issue of the applicability of a cessation clause as it pertains to the said group of refugees have substantially augmented their state of limbo and uncertainty about their future; the situation under which they have been living for two decades to date.

Key words: Rwandan refugees, cessation clause, forced repatriation, local integration, resettlement, socio-economic exclusion.



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Refugees from various countries stage a protest on 2013 World Refugee Day, outside the South African Parliament. Photo: AFP/Rodger Bosch

1 INTRODUCTION

Like many Western countries, South Africa has adopted an urban asylum policy, which is based on the temporary protection of refugees.¹ To that end, refugees and asylum-seekers are treated as “temporary residents,” a legal position that implicitly subjects them to restrictive immigration principles, namely exclusivity and self-sufficiency.² Such treatment is inimical to the purpose and principles of the 1951 Convention relating to the Status of Refugees and the 1969 OAU Convention Governing the Specific Aspects of Refugees in Africa. These international refugee agreements became a binding law in South Africa when they were enacted into law by the Refugees Act of 1998, as amended.³ Even so, the twin principles of exclusivity and self-sufficiency have deleterious impact on protection of refugees and asylum-seekers generally with respect to access to socio-economic services and to livelihood opportunities. They have an implication of excluding refugees and asylum-seekers in socio-economic arrangements.

In the case of Rwandan refugees who are estimated at 1 600 (0.5% of the global Rwandan refugee population),⁴ protection challenges do not only emanate from socio-economic exclusion but also from the United Nations High Commissioner for Refugees (UNHCR)’s recommendation that said Rwandan refugee status be revoked through the invocation of cessation clause in accordance with Articles 1C(5) and 1C(6) of the 1951 Refugee Convention.⁵ Added to this challenge are also those of insecurity, fear and terror, caused by an unending hunting down of Rwandan

refugees who live in South Africa and elsewhere. In South Africa, there are constant assassinations, attempted assassinations, intimidations and threats carried out by Rwandan espionage through the Rwandan embassy, based in Pretoria.⁶ These issues have become a source of imprisonment in fear, predicament, and deprivation, especially for Rwandan refugees who fled Rwanda between 1994 and 1998, to whom cessation clause currently applies. It is believed that 99% of the 1994-1998 refugee population who remain in exile are Hutus. However, Hutus never ceased to flee Rwanda. Those include Hutus who were forced to return under forced massive repatriation, which occurred between 1996 and 2000. Similarly, Tutsi dissidents have been fleeing Rwanda steadily. Among their many motives to seek asylum in other countries are appalling human rights abuses, perpetrated through state-sponsored violence.⁷ At global level, the Rwandan refugee population is virtually estimated at 300 000.⁸

The paper therefore illuminates issues of human and refugee rights protection challenges faced by Rwandan refugees in South Africa, with specific reference to the 1994-1998 Rwandan refugees. These challenges are critically analysed in light of three durable solutions, namely, integration, resettlement and repatriation. Each durable solution will be discussed under a separate section in order to delineate difficulties ingrained in domestic laws as they are typically reinforced by the UNHCR attitudes towards Rwandan refugees. The methodological approach towards the analysis of issues of protection in this paper is based on careful examination of the impacts of general treatment of refugees in South Africa and of attitudes of both UNHCR and government of Rwanda towards Rwandan refugees. Included is South Africa's political approach towards resolving the Rwandan refugee situation.

2 Integration

South Africa's asylum law is an asylum policy based on self-settlement/integration and self-sufficiency.⁹ It has been praised by the UNHCR as one of the most progressive in the world. However its approach to integration is in itself the major shortcoming that has an adverse impact on refugees' integration. South Africa does not offer any material support or humanitarian relief to refugees that would prepare them to adapt to the average South African life style. According to UNHCR, integration is described as:

a legal process, whereby refugees are granted a progressively wider range of rights and entitlements by the host State that are broadly commensurate with those enjoyed by its citizens. These include freedom of movement, access to education and the labour market, access to public relief and assistance, including health facilities, the possibility of acquiring and disposing of property, and the capacity to travel with valid travel and identity documents. Realisation of family unity is another important aspect of local integration.¹⁰

In a broad sense, a progressively wide range of rights and entitlements are implicitly conferred on refugees and asylum-seekers in terms of the South African Refugees

Act of 1998. Except the right to have access to the labour market which is directly guaranteed by the Act,¹¹ other socio-economic rights are indirectly guaranteed and protected.¹² An absence of direct protection of socio-economic rights has the dire consequence of excluding refugees and asylum-seekers in socio-economic laws and strategies, aimed at alleviating the poor as well as the most vulnerable and desperate people out of poverty and thereby advancing them socially and economically. Both refugees and asylum-seekers are excluded from most essential socio-economic arrangements on the basis of their legal position in South African society. They are temporary residents who are afforded temporary protection. For this reason alone, they are wholly precluded from accessing the public labour market and partially from private labour market. First, the Public Service Act 103 of 1994 restricts eligibility of employment in public sector to citizens and permanent residents.¹³ Second, the Employment Equity Act 55 of 1998 prioritises and optimises employment of South African citizens who are previously disadvantaged by apartheid policies in what is termed "Affirmative Action Measures (AAM)." Private industries are obliged to establish an employment plan conforming to the AAM, thereby limiting employability chances of refugees and asylum-seekers. Third, employers erroneously apply the immigration restrictive rules imposed on the recruitment of non-citizens for the protection of the national labour market. The rule requires employers to recruit non-citizens in a position under which no suitable qualified citizen or permanent resident is available to fill.¹⁴ All these makes it more and more difficult for unskilled and low skilled refugees or asylum-seekers to find placements.

The labour regulations have been a major problem hampering Rwandan refugees from rebuilding their lives and livelihoods in South Africa. Generally, exclusion of refugees is grounded in the hyped fears of employers and service providers that the Immigration Act of 2002 could impose penalties on them if they do not comply with its rules.¹⁵ This misconception is further reinforced by political statements, which hold that the majority of refugees are bogus or economic migrants who are in South Africa in a search of a better life.¹⁶ There is apparently an inability to distinguish between applicability of the immigration regime and refugee regime.¹⁷ However, it is true that the Refugees Act of 1998 strictly exempts refugees and asylum-seekers from the immigration restrictive measures imposed on non-citizens in certain circumstances. This notwithstanding the exemption, the immigration rules are somehow applied to *bona fide* refugees, such as Rwandan refugees, by public and private agents. Wholly, *bona fide* refugees are normatively faced with difficulties to be employed in various economic activities; hence discrimination on the basis of their refugee status has become the norm.

In addition to this, the documentation of asylum-seekers and refugees within a reasonable time has since opening borders to refugees in the late 1990s challenged South Africa. That is among the reasons why some Rwandans, like some other refugees, are in possession of no valid but expired papers. For others, their applications for either asylum or permanent residence permits are still pending.

Applications may unduly be pending for more than seven years. Without a formal refugee status or without valid documentation however, these refugees cannot access a range of socio-economic services, provided by private and public institutions, insofar as refugee documentation is a concern. There is a noticeable and recurring problem: the issuance of the maroon identity card. The refugee identity card is not recognised by most of the employers and service providers as a legitimate South African document. On the other hand, the document is viewed by civil societies and refugees themselves as a basis of unfair discrimination. To make the lives of refugees hard and the situation more complicated, refugees sometimes collect their identity cards from the offices of the Department of Home Affairs (DHA) when they are about to expire or are already expired. Similarly, refugees are issued with travel documents that are not recognised by many countries as a document that allow refugees to travel. All these documentation problems are impediments to a successful integration process of Rwandan refugees many of which have been living in South Africa from as early as 1996.

The first movement of Rwandan refugees arrived in South Africa in December 1996 after escaping forced massive repatriation, perpetrated by Burundi, Tanzania, Uganda, Democratic Republic of the Congo (DRC) and Gabon without regard of said refugees' fears of a personal, real and foreseeable risk of persecution or torture and of probable human rights abuses back home. In 1997, Gabon authorities arrested and handcuffed all Rwandan refugees and took them to Kigali.¹⁸ In Rwanda, all victims of the forced massive repatriation were welcomed by different atrocities resulting in those who survived fleeing the country all over again. Some of the survivors of the forced massive repatriation are currently in South Africa. They are living in a protracted and continual state of limbo, which is consolidated by political unwillingness to integrate them within South African communities. Political unwillingness is, in actual fact, illustrated by the lowly insignificant number of twelve (12) Rwandan refugees, who are, at the moment, holders of permanent residence permits.¹⁹ As permanent residents, they are entitled to 'all the rights, privileges, duties and obligations of a citizen, save for those rights, privileges, duties and obligations which a law or the [South African] Constitution explicitly ascribes to citizenship'.²⁰ A permanent residence permit is a vehicle to full integration. In terms of section 27(c) of the Refugees Act, a recognised refugee is eligible to apply for permanent residence permit after five years of continuous stay in South Africa from the date on which he/she was granted asylum. It needs be noted that the Constitutional Court, with reference to integration, ruled that recognised refugees cannot be treated 'as permanent residents because they are not in the same [legal] circumstances for the simple reason that they have yet to meet the requirements for permanent residence'.²¹ The requirements include an onus placed on a refugee applicant to provide compelling reasons demonstrating that he/she will remain a refugee indefinitely, subject to an approval by the Standing Committee for Refugee Affairs (SCRA). Individual compelling reasons must arise from political conditions prevailing in the country of origin.

What is apparent from the above analysis is that, for more than a decade, Rwandan refugees were unable to turn their refugee rights into actual entitlements. They remain poor, vulnerable and in a precarious situation. It is sad that the majority of them cannot afford dignified or even adequate housing, let alone affording sending their children to school. In many instances, some of their children are unable to enjoy their right to basic education due to possessing expired documentation, which the lack of validation thereof is not to their parents' fault but due to the DHA's inefficiency, coupled with a lack of political will to improve refugee administrative services. It cannot be denied that documentation is also a vehicle to accessing socio-economic freedom. The freedom advocated here is not the one based on property and free market, but the freedom to acquire, within a reasonable time, valid and legitimate documents that will allow the bearer open access to certain socio-economic services. In a refugee's life, the key ingredient to socio-economic freedom is, in an explicit way, favourable treatment that creates conditions that increasingly recognises refugee rights, including, for instance, exercise of individual autonomous choice, freedom to compete in labour markets, access to socio-economic rights, and, at the very minimum, protection of their dignity, health and well-being. Normally, socio-economic institutions and policies are consistent with the standards of socio-economic freedom when they aim at improving the conditions of the poor, vulnerable people to such an extent that they are able to care for themselves and live in dignified conditions, comparable to those around them.

For the protection of dignity of human beings, work is the most essential right that would restore the hope and dignity that refugees have lost. There is a strong relationship between work and attaining an adequate standard of living and of being accepted as socially useful in a community, or as a valued member of society. The paper therefore argues that it is within this freedom to work that people realise their human fulfilment and enormously contribute to social progress and the prosperity of a nation instead of being a financial burden on a state purse. This is possible only if the state is of course willing to integrate refugees in its society. Increasingly, refugees are inextricably tied to socio-economic exclusion due to the misconception of regarding them as "alien," "not belonging," "others" or "*makwerekwere*" (a slang for foreigners in South Africa) within their host communities. In South Africa, the majority of citizens support a political argument holding that refugees must return back to their respective home countries. This leads the author to examine when it is possible for refugees to return home.

2 Voluntary Repatriation

Refugees are intimately connected to a reasonable or well-founded fear of return to their home countries where they truly belong. They fled their countries and become refugees in foreign countries because remaining in their home countries would have been risking their lives. In other words, conditions prevailing in their home countries have worsened to such a degree that they are no longer tolerable and endurable. Fleeing may be seen as the solution to such a situation, but, fundamentally, fleeing

creates a refugee problem that is mainly resolved through voluntary repatriation, as a viable solution. Before repatriation, a refugee problem is ethically dealt with by the host state in cooperation with other countries through the UNHCR. Other durable solutions are local integration and resettlement. However, among these three durable solutions, voluntary repatriation is, according to the UNHCR, the best and most viable solution.

Normally, refugees are expected to return voluntarily. If not, Article 1C(5) of the 1951 Refugee Convention permits the host state to return refugees to their home countries involuntarily when 'the circumstances in connexion with which [they have] been recognized as [refugees have] ceased to exist'. Conversely, Article 1C(5) does not apply to refugees who are able to demonstrate that there are compelling reasons arising out of previous persecutions for their refusal to return. Alas, Rwanda is characterized by systematic, well-organised, state-sponsored ethnic and political violence. They range from arbitrary arrest, *incommunicado* detention, torture, trumped-up charges, to enforced disappearances. In the year 2014 alone, more than 50 000 people were made or forced to disappear.²² In a situation such as this, involuntary repatriation is at odds with the principles of *non refoulement*, freedom from torture, and human dignity. Essentially, forced repatriation deprives concerned refugees of their fundamental rights and freedoms, more precisely individual autonomy and humane treatment. Ethically, human and refugee rights are built on the liberal principles of autonomous choice and most favourable treatment – ingredients of an ideal of human dignity – that is recognised by most free and democratic societies, including South Africa. In that, respect for human dignity of refugees should include desisting from treating refugees as mere objects in the sense of forcing them to return without giving them an opportunity to be heard. Refusing them such an opportunity points to a real fact that refugees, upon losing the protection of their state, enjoy fewer and insignificant rights. Truly, they have lost their primary protector of their rights and freedoms or they have lost a virtue of citizenship and rights associated with it. As result, both UNHCR and host states traditionally trespass the refugee rights as they please without any legal repercussions. This includes invocation of cessation clause to which affected refugees are vulnerable and defenceless. Fundamentally, it impairs the refugees' basic rights in a way of subjecting said refugees to further persecution, torture or death back home. This behaviour of pushing them from pillar to post cannot at all give them a space to foster a life of dignity. The principles of *non refoulement*, in combination with the principles of human dignity and most favourable treatment imposes a responsibility in certain circumstances on States not to apply the cessation clause to refugees and asylum-seekers, whose home country is not safe for them to return. Otherwise, the decision to implement cessation clause will result in the violation of a number of fundamental rights, including the right to life, to equality, to human dignity and to freedom from ill-treatment and torture; all lies at the heart of the 1951 Refugee Convention, human rights law, and constitutional frameworks.

Within this perspective, Paul Weis describes refugees as 'a vessel on the open sea, not sailing under any flag'²³ while Hannah Arendt observed that refugees are

without rights because each nation-state has primary obligation to protect the rights, interests and expectations of its own citizens first, no matter where they are.²⁴ However, both international and national refugee laws are adopted with the sole aim to ensure entitlement of the basic rights, proclaimed under a range of human rights conventions.²⁵ Under these conventions, respect for human dignity of each and every human person is underlined as a foundation to freedom, justice and peace. Seemingly, human dignity (standard of humanity treatment) is in most cases ignored and thus host states proceed to forcefully repatriate refugees without having regard to what might happen to them once returned.

Other principles that are, in a situation of Rwandan refugees, not observed by host countries are due process and presumption of innocence.²⁶ Regardless of these principles, once Rwandan refugees have left their state, they were viewed as fugitives who must be hunted down. The government installed by the Rwandan Patriotic Front (RPF) in July 1994 'has built [its] credentials on the heroic tale of having stopped the Tutsi genocide and sending the Hutu "genocidaires" into exile.'²⁷ For that reason, the RPF government has been arguing that those who fled Rwanda between 1994 and 1998, regardless of their well-founded and reasonable fear to repatriate, 'have a dark, ugly past to hide and are running away from prosecution' but not persecution.²⁸ Whereas it cannot be denied that some genocide perpetrators remain at large, it can strongly be argued that a list of Hutu refugees who were suspected of having committed genocide crimes was established and thus handed out by the RPF government to the International Criminal Tribunal for Rwanda (ICTR). Accordingly, genocide suspects were arrested and transferred to ICTR for prosecutions. Only nine suspects wanted for trial by the ICTR remain at large.²⁹ These nine fugitives do not justify branding all Rwandan Hutu refugees, their children, and their unborn children as criminals on the run.

Unfortunately, with acknowledgement of the RPF version as the only truth, Rwandan refugees were and are still deprived of humanness and subsequent rights associated with humanity. Even the UNHCR, which is mandated to protect them, views them as "social outcasts." The campaign to manhunt Rwandan refugees began with the invasion of DRC by the RPF government in 1996. The main purpose of the invasion of DRC was to force Rwandan refugees to return home and face justice as it was falsely projected. This idea was nonetheless supported by the international community and, as a result, Rwandan refugee camps were bombed under the auspices of the UNHCR. Resultantly, said refugees were, by use of military force, repatriated. A handful of them were left scattered in the forest of DRC and they were abandoned to their own fate. To date, about 245 000 Rwandan refugee, including women, children, elderly and the infirm, remain in the forest of DRC without any humanitarian assistance.³⁰ Some who escaped the horrendous campaign sought refuge in Africa, South Africa included, and elsewhere, including Europe and the United States (US). Since then, survivors of these unspeakable atrocities live under consistent fear of being assassinated by Rwandan espionage agents or even facing forced repatriation in their respective countries of asylum. For the specific purpose of hunting refugees,

the RPF government has created an asylum system scandal whereby bogus Rwandans pretending to be refugees infiltrate countries hosting Rwandan refugees and clandestinely work as espionage agents to kill said 'old' refugees, most often through poisoning, them. Most targeted for these modes of elimination are Tutsi critics of the current Rwandan government and Hutu intellectuals. The list of the Rwandan refugees assassinated in exile is non-exhaustive.³¹

For example, an inquiry into the brutalities perpetrated against the 1994-1998 Rwandan refugees who had sought a safe haven in the DRC, conducted by the United Nations' Office of the High Commissioner for Human Rights (OHCHR) and eventually released under the 2010 Mapping Report,³² revealed that the UNHCR and other international agencies collaborated with the RPF in the military operation to forcefully repatriate Hutu refugees between 1996 and 2000. The military operation cost the lives of more than 300 000 Hutu refugees in a systematic and discriminatory manner. This barbaric conduct, which, among others included blockages of humanitarian assistance by the RPF soldiers caused a lot of death, malnutrition and disease.³³ Rwandan refugees – survivors of this barbarism, – who live in South Africa or elsewhere, psychologically suffer from these brutalities and trauma associates with them. It remains fresh in their minds.

We should also note that those refugees, who were not fortunate to cross the DRC forest to seek asylum in other countries are among those whom the UNHCR is targeting to involuntarily repatriate. This conduct of the UNHCR has led Rwandan refugees to ironically praise it for its steady contribution to their trauma, social stigmatisation, massive massacre, fear, persecution, and, in various respects, to their impoverishment. It is therefore not surprising that OHCHR, after a thorough inquiry, came to the conclusion that the above-mentioned barbaric acts against refugees constituted war crimes, crimes against humanity and possibly crimes of genocide, subject to confirmation by a competent international criminal court or tribunal.³⁴ So far, no charge has been brought forward. Justice is denied not only to families of the Hutu refugees but also the families of six to eight million people, perished during said forced and militarised repatriation (which culminated in the deposing of President Mobutu) and the subsequent on-going armed violence in the east of DRC.

Up to now, the UNHCR has not yet left Rwandan refugees to rest. Because of this, some are hiding in rural villages and others are always on the run, from one village to another, from one city to another, or from one country to another. What can be inferred from this is the fact that, in failing Rwandan refugees, the UNHCR has failed to honour its international obligation to protect refugees.

For instance, uncertainty about the 1994-1998 Rwandan refugees' future in exile is compounded by the recent resolution of the United Nations Security Council (UNSC) to launch military attacks on refugees based in the DRC.³⁵ No account has been taken concerning the fact that they are survivors of the 1996-2000 massive forced repatriation and that they have been more vulnerable to extremely stressful and traumatic events that took place since the invasion of Rwanda on October 01,

1990.³⁶ Although they are indeed susceptible to posttraumatic stress disorder, depression, high level of fear and anxiety (psychosomatic) and/or malnutrition caused by the persecution and destruction of the war, no one who wants to empathise with them. Though the resolution may, on the face of it, appear unrelated to the protection of Rwandan refugees in South Africa and thus exclusive, it is interrelated with and reinforces the applicability of the cessation clause. Military attacks and cessation clause reinforce one another at the point of intersection. All these international measures target the 1994-1998 Rwandan refugees. In other words, the United Nations (UN) appears here to be prepared to use all its powers to ensure this category of refugees is repatriated. Why? They are viewed as a threat to international peace and security. Paradoxically, in order to promote viable peace in the Great Lakes region in general and in Rwanda in particular, the declaration of applicability of Articles 1C(5) and 1C(6) was made in 2003 and their implementation as applied to all Rwandan refugees was initially set for 31 December 2011, then postponed to 30 June 2012, then finally set for 30 June 2013. This time however, it was restricted to Rwandan refugees who fled Rwanda between 1959 and 1998. However, on closer examination, its hidden agenda is a pretence to also include Tutsi refugees (who fled Rwanda between 1959 and 1994) and to force Hutu refugees (who fled between 1994 and 1998) to return. In fact, the 1959-1994 Tutsi refugees returned home upon the fall of Kigali at the hands of Tutsi refugees' rebellion in July 1994. Unlike the post-1994 Rwandan refugees, the pre-1994 (mainly Tutsi) refugees were locally integrated in their communities. They were equally working in both public and private sectors. For example, President Kagame is a former Ugandan army officer and a former Director of Uganda's Military Intelligence. Most of current Rwandan officials were integrated well enough in their former host countries.³⁷ On the other hand, the post-1994 Rwandan refugees could not be integrated into their host communities due to the contemporary strict immigration measures, reinforced by the terrorism control and emerging exclusionary socio-economic and labour measures.

Irrespective of their daily struggle to earn a living, the 1994-1998 Rwandan refugees are facing an imminent threat of forced repatriation. As luck would have it, they remain in South Africa because South Africa has not yet approved the UNHCR recommendations. In Africa, only four host countries – Cameroon, Zambia, Zimbabwe, Malawi, and DRC agreed to apply the said provisos. Later Zambia opposed repatriation and rather offered local integration to 4000 Rwandan Hutu refugees, more or less, through naturalisation.

In light of the above, legal positions of the 1994-1998 Rwandan refugees who live in South Africa remain unclear. In particular, the UNHCR recommendation has in various respects affected the legitimacy of the claims of asylum, lodged by those who fled Rwanda as from 1999. Admittedly, Rwanda cannot be safe for some post-1994 refugees to return to, and simultaneously be dangerous to others, more specifically those who are fleeing it today. Allowing the post-1999 refugees to remain in exile, coupled with accepting individual fleeing Rwanda to lodge fresh claims of asylum, are all

factors pointing to the fact that Rwanda is not a safe and stable country it is portrayed to be. To Rwandan refugees and international human rights organisations, the recommendation of the invocation of cessation clause is another mechanism of forcing refugees to return against their will and perhaps oppressing them when they arrive home. According to the former South African Minister of Home Affairs, Ms Naledi Pandor, 'much work was still needed to be done on the part of the UNHCR to clearly articulate the reasons for the revocation of the Rwandan refugee status.' To her, the cessation declaration merely served to augment anguish and uncertainties among Rwandan refugee who remain unwilling to return due to various valid and legitimate reasons.³⁸

Lack of consultation with affected refugees is amongst valid reasons. In principle, refugees must be consulted in the processes leading to the cessation clause, but Rwandan refugees were never consulted by the UNHCR. On top of this, it objected to taking into account the human rights reports, indicating that Rwanda was not a safe place to return. The attitude of the UNHCR and international community as a whole towards Rwandan refugees leads Arendt's observation to be true: Refugees are without even basic human rights. Having the UNHCR and international community's backs turned against Rwandan refugees, they are left on their own. They are left with no choice but to put themselves at the mercy of South Africa. The revocation of refugee status has an implication of depriving them the right enjoyed by other refugees in their host countries. They are no longer among refugees recognised by the UNHCR. All this which begs the question of "who are they in South Africa?" or "what is their legal position in South Africa?" Of course, at this stage, they are neither naturalised citizens nor granted permanent residence. So are they bogus refugees, economic migrants or illegal foreigners?" South Africa is yet to declare their legal status in this respect.

The bottom line is this; what Rwandan refugees want and perhaps even need is to return home in a dignified way and in a peaceful country characterised by the rule of law, liberalisation and democratisation. It is the refugees' desire to return to a country where the government derives from the will of people and where equality in rights, in dignity, in benefits and in opportunities is at the centre of the distribution of national resources and materials. They are highly unlikely to return to a country where people are debased and degraded through collective guilty political rhetoric, arbitrary enforcement of the genocide laws, arbitrary arrest, forced disappearance, and arbitrary detention. Voluntary return is possible provided that every Rwandan citizen is treated with equal concern, dignity, respect, and care. The author turns to analyse the problems related to resettlement.

3 Resettlement

As noted above, resettlement is one of the three espoused durable solutions. In circumstances where local integration is not viable option and where the conditions in their home country remain intolerable for refugees to return, the only viable solution is

to resettle them in a third country. In principle, a resettlement is considered when it is transpired that a refugee is 'at risk in the county of first asylum or there is no other durable solution to [his or her] plight.'³⁹ It is described as:

[t]he transfer of refugees from the country in which they have sought refuge to another State that has agreed to admit them. The refugees will usually be granted asylum or some other form of long-term resident rights and, in many cases, will have the opportunity to become naturalized citizens. For this reason, resettlement is a durable solution as well as a tool for the protection of refugees.⁴⁰

The UNHCR plays a leading role in finding third countries willing to provide a permanent safe haven to refugees. Above all, the main purpose of creating the UNHCR is to protect refugees and asylum-seekers and to help them find durable solutions to their plight. In the case of Rwandan refugees, the UNHCR believes that a viable solution to their refugee problem is to repatriate them whether they like it or not. This standpoint towards solving the Rwandan refugee problem is prejudicial to some Rwandan refugees' efforts to seek a resettlement in a third country as a solution. It is not in dispute that many of them are facing an imminent threat posed by the hunting down of Rwandan refugees (regardless of their ethnic backgrounds) by Rwandan espionage. Although a very small percentage of Rwandan refugees might be beneficiaries of resettlement as a solution to their plight, it is an extremely important protection tool that must be available to them on account of their refugee status.

For almost 20 years, Rwandan refugees remain in exile without a hope of a durable solution to their refugee problem. They are not integrated in the South African society. Repatriation remains unattainable because they can risk their lives if they return home. Yet, UNHCR deprives them their refugee status and thus international protection, which could qualify them for resettlement and other UNHCR opportunities. Accordingly, they are living in prolonged and indefinite limbo in the midst of continued exclusion from essential socio-economic structures.

Rwandan refugees are not victims of the UNHCR's policy *per se* but the victims of the superpower's foreign policies that place economic interest above human rights. The US, United Kingdom (UK), France, and other Western countries manipulate the doctrines of human rights and good governance to suit their economic interest and national priorities but not to suit vulnerable and voiceless humanity in Africa.⁴¹ Their support for the RPF remains unwavering despite numerous reports of human rights violations which predates the Rwandan genocide and which triggered genocide and led to the destabilisation of the Great Lakes region. History is full of evidence that US supported and still supports African dictatorial regimes. It was at the top of those countries that supported the apartheid regime in South Africa and Namibia. In a similar fashion, the US continue to turn a blind eye to heinous crimes and human rights violations, committed through state-sponsored violence by the Kigali regime, led by strong man President Paul Kagame. This is contrary to the President

Obama's statement in Accra that African countries need a strong, democratic, and responsive institution but not strong men. The US's double standards have cost the lives of Rwandans, be it inside and outside Rwanda, for more than two decades now.

4 Concluding Remarks

Rwandan refugees are caught in the line of fire of national and international politics. In South Africa, they find themselves in a xenophobic environment due to the majority of South African's fear that non-citizens might benefit from the fruits of their liberation struggle.⁴² South Africa is the country that has the third highest number of refugees and asylum-seekers in the world.⁴³ For instance, between 2008 and 2013, it has registered 869100 asylum-seekers. By 2013, the number of individuals recognised as refugees was 65 881.⁴⁴ This figure included an unknown number of those Rwandans recognized as refugees. Nonetheless, the perception persists that a higher number of refugees and asylum-seekers pose a threat to South Africa's interest, especially in the area of national security, socio-economic liberalisation and economic globalisation. This era of globalised economy is characterised by the shrinking of the international solidarity and burden-sharing, which had traditionally been the foundation for the response to refugee problems around the world.

Besides, it is now evident that the competition between refugees and citizens in the South African labour market and other economic sectors is not only the means for survival but also a source of xenophobic violence in South Africa. Why? Because South Africans are not willing to share their economic and material resources with refugees and asylum-seekers. Though South Africa opened its borders and welcomed refugees fleeing persecutions, the current approach towards treatment of refugees shows a sign of a fatigue of hosting refugees.⁴⁵ It becomes a metaphysical question as to whether Rwandan refugees should blame South Africa for having laws that protect the human rights and interests of its citizens or whether they blame the superpowers foreign policies that led to the negation of the principles of human and refugee rights, resulting in their current sufferings and predicament or whether they blame the oppressive regime installed in Rwanda, a regime only interested in tracking them down for assassination. Openly, their subjection to the RPF' political maneuvers, in its complicity with the superpowers, through UNHCR, has rendered Rwandan refugees the scum of the earth – unwanted, vilest people – who do not deserve respect and concern, rather desire to be arrested on the basis of unjustified criminal allegations and thus returned to Rwanda. To Rwandan refugees, human rights is nonsense, valueless; a non-substantive ideal and nothing else but a political rhetoric.

In reality, superpowers' foreign policies are designed and formulated to advance their security and prosperity at the expenses of the third countries' humanity. It has been proven that they care less about human rights and democratic governance. It is within this context that President Kagame and President Museveni are, for example, praised to be visionary leaders, instead of being isolated and sanctioned for their dictatorial leaderships.

NOTES AND REFERENCES

An earlier version of this paper was drafted for and presented at the refugee roundtable discussion on Human Rights, Protection and Challenges Faced in South Africa, organised by the Agency for Refugee Education, Skills, Training & Advocacy (ARESTA), facilitated by the Embassy of the United States of America in Cape Town, South Africa 23rd October 2014.

1 For temporary protection discussion, see Handmaker J (2001). No Easy Walk: Advancing Refugees in South Africa. *African Today*. Vol. 48. Pp91-113; Aruforce v Minister of Home Affairs and others, Case No. 2010/1189 para 5 (an asylum-seeker is granted a temporary asylum-seeker permit in accordance with section 22(1) of the Refugees Act); and Kerber K (1999-2000). Temporary Protection in the European Union: A Chronology. *Georgetown Immigration Law Journal*. Vol. 14:35, pp35-50.

2 Section 30(1)(a) of the Immigration Act 13 of 2002, as amended by the Immigration Amendment Act 13 of 2011 prohibits an admission of non-citizens who cannot take care of themselves while staying in South Africa and allows deportation of those whose likely to become a public charge. This approach towards migrants signifies that they cannot have access to socio-economic programmes.

3 Act 130 of 1998, as amended by the Refugees Amendment Act 33 of 2008 and Refugees Amendment Act 12 of 2011.

4 In 2011, UNHCR estimated that there was about 100 000 Rwandan refugee population globally and that 56 000 refugees resided in the Democratic Republic of Congo (DRC) (See UNHCR. Implementation of the Comprehensive Strategy for the Rwandan Refugee Situation, including UNHCR's recommendations on the applicability of the "ceased circumstances" cessation clause. IOM/093 – FOM/094/2011 (hereafter "the 2011 UNHCR's Recommendations on the Applicability of the Cessation Clause") at para 5). Yet according to the most recent DRC's National Commission for Refugees (CNR) figures, the Rwandan refugee population in DRC was virtually at an estimated 245 000. In 2012, the Department of Home Affairs estimated the figure of the Rwandan refugee population to be at 1600. The number of the Rwandan refugees who fled Rwanda between 1994 and 1998 remains unclear.

5 See the 2011 UNHCR's Recommendations on the Applicability of the Cessation Clause (n4 above).

6 For more detailed information with respect to hunting down Rwandan refugees, see for example, Kavuro C (2012). Rwandan Diplomats Intensify Threats And Intimidations Towards Rwandan Refugees. *The Rwandan*. Available at <<http://www.therwandan.com/blog/rwandan-diplomats-intensify-threats-and-intimidations-towards-rwandan-refugees/>> Retrieved on 01 October 2014 and Wrong M (2014). 20 yrs after Rwandan genocide, is Kagame's govt assassinating critics?. *Rwanda Speaks*. <<http://rwandaspeaks.com/tag/president-paul-kagame/>>. Retrieved on 23 September 2014.

7 See, for example, RDTJ (2014). RDTJ Briefing Notes: Endless Persecutions of Rwandans. Issue 1, November 2014. See too Amnesty International (October 2012). Rwanda: Shrouded in secrecy: Illegal detention and torture by military intelligence. Report AFR 47/004/20 and Human Rights Watch (May 2014). Rwanda: Spate of Enforced Disappearances. Available at <<http://www.hrw.org>>. Retrieved on 15 October 2014.

8 See the 2011 UNHCR's Recommendations on the Applicability of the Cessation Clause (n4 above) and CNR (n4 above).

9 Handmaker J (2002). Evaluating Refugee Protection in South Africa. SAMP Migration Policy Brief 7; Landau LB (2007). Regional Integration, Protection and Migration Policy Challenges in Southern Africa. In Handmaker J & Klaaren J (Ed.). *Advancing Refugee Protection in South Africa*. (pp27-46) New York: Oxford, Berghahn.

10 UNHCR (2002). Local Integration, Global Consultations on International Protection, EC/GC/02/6, 25 April 2002, Para 5.

11 Section 27(f) of the Refugees Act 130 of 1998 states that a refugee is entitled to the right to seek employment.

12 Ibid: section 27(b) states "a refugee enjoys full legal protection, which includes the rights set out in Chapter 2 of the Constitution and the right to remain in the Republic in accordance with the provisions of this Act."

13 See section 10 of the Public Service Act 103 of 1994.

14 Section 19(2)(a) of the Immigration Act 13 of 2002.

15 Ibid: Section 49.

16 See Landau LB (2006). Protection and Dignity in Johannesburg: Shortcomings of South Africa's Urban Refugee Policy. *Journal of Refugee Studies*. Vol. 3, p 316 and Danso D & McDonald DA (2001). Writing Xenophobia: Immigration and Print Media in Post-Apartheid South Africa. *Africa Today*. Vol. 48, p119.

17 CorMSA (2009). Protecting Refugees and Asylum-Seekers and Immigration. (p106) Johannesburg: CorMSA states that employers object to employing refugees and asylum-seekers on the basis of being non-citizens or because they are unfamiliar with the validity of the documentation issued to refugees and asylum-seekers.

18 See Kanene (August 2011). Are Rwandan Hutu Refugees Facing Discrimination in the International Protection Regime?. Available at <<http://kanere.org/2011/08/21/are-rwandan-hutu-refugees-facing-discrimination-in-the-international-protection-regime-2/>>. Retrieved on 13 October 2014.

19 Statistics South Africa (March 2013). Documented immigrants in South Africa, 2012. Statistical release. P0351.4, p58.

20 Section 25 of the Immigration Act 13 of 2002.

21 Union of Refugee Women & Others v The Director: The Private Security Industry Regulatory Authority & Others, 2007 (4) BCLR 339 (CC), para 65 (concerning the rights of refugees to work in the private industry in South Africa).

22 See RDTJ (n7 above), Amnesty International (n7 above) and Human Rights Watch (n7 above).

23 Weis P (1954). The International Protection of Refugees. *American Journal of International Law*. Vol. 48, p193.

24 Arendt H (1979). The Origins of Totalitarianism. (p267). Florida: Harcourt Brace Jovanovich, stated that 'once [refugees] had left their homelands they remained homeless, once they had left their state they became stateless; once they had been deprived of their human rights they were rightless, scum of the earth.'

25 They are, for example, the International Covenant on Economic, Social and Cultural Rights, GA Res 2200A (XXI) of 16 December 1966 (ICESCR) and International Covenant on Civil and Political Rights, 2200A (XXI) of 16 December 1966 (ICCPR).

26 See Art. 14(1)-(7) of the ICCPR.

27 Yolletta Nyange 'Rwanda's refugees should not be forced to return,' 30 Jun 2013, available at <<http://www.aljazeera.com/indepth/opinion/2013/06/20136301155211706.html>>. Retrieved on 02 October 2014.

28 Nyange op.cit. (n27 above).

29 Upon the closure of the ICTR, the ICTR Prosecutor requested referrals to Rwanda in the cases of six fugitives: Fulgence Kayishema, Charles Sikubwabo, Ladislas Ntaganzwa, Aloys Ndimabati, Charles Ryandikayo, and Pheneas Munyarugarama to be tried by the Mechanism for International Criminal Tribunals (MICT). The MICT also retains jurisdiction over the following three accused: Mr Felicien Kabuga, the alleged chief financier of the genocide; Major Protas Mpilanya, the former commander of the Presidential Guards; and former Defense Minister Mr Augustin Bizimana.

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31 Examples of those assassinated includes Col. Théoneste Lizinde and businessman Augustin Bugirimfura (both assassinated in Nairobi, Kenya, on 6 October 1996); former Interior Minister Seth Sendashonga (assassinated in Nairobi, Kenya, on 5 May 1998); former CEO of Rwanda African Continental Bank Pasteur Musabe (assassinated in Yaoundé, Cameroon, on 14-15 February 1998); Regina Uwamariya, the sister of Col. Théoneste Bagosora (assassinated in Brussels, Belgium, in December 2000); Col. Laurent Bangaya (assassinated in Nigeria, in June 2003); Charles Ingabire, a Rwandan journalist (assassinated in Kampala, Uganda, on 01 December 2011); Théogène Turatsinze (murdered in Maputo, Mozambique, on 15 October 2012); Col. Patrick Karegeya, former external intelligence chief (assassinated in Johannesburg, South Africa, on 31 December 2013), and Emile Gafirita (made to disappear in Nairobi, 13 November 2014).

32 United Nations Office of the High Commissioner for Human Rights (OHCHR), Report of the mapping exercise documenting the most serious violations of human rights and international

humanitarian law committed within the territory of the Democratic Republic of the Congo between March 1993 and June 2003.

33 OHCHR op.cit. (n32 above), para 98.

34 OHCHR op.cit. (n32 above), para 85.

35 SC/11533 of 28 August 2014; SC/11586 of 3 October 2014; S/PRST/2013/17 of 14 November 2013; and S/PRST/2015/1 of 8 January 2015.

36 They include but not limited to beating and torture, combat situation, shelling/bomb attacks, experienced crossfire/sniper attacks, experienced burning houses, injured with weapons, rape, sex for food/security, witnessed suicides, witnessed dead, witnessed torture and witnessed killing and torture.

37 For more details, see Kintu R (March 2005) .The Truth Behind the Rwandan Tragedy. Available at <<http://repositories.lib.utexas.edu/bitstream/handle/2152/4486/3588.pdf?sequence=1>>. Accessed on 18 October 2015.

38 See Opening remarks by Home Affairs Minister Ms Naledi Pandor during UNHCR meeting on the Implementation of the comprehensive Durable Solution Strategy. 18 April 2013. Available at <<http://www.dha.gov.za/index.php/statements-speeches/152-opening-remarks-by-home-affairs-minister-ms-naledi-pandor-during-unhcr-meeting-on-the-implementation-of-the-comprehensive-durable-solutions-strategy>>. Retrieved on 18 October 2014.

39 Jastram K & Achiron M (2001). Refugee Protection: A Guide to International Refugee Law. Geneva. UNHCR. pp78,91.

40 Jastram & Achiron op.cit. (n39 above) p132.

41 See, for example, Uwizeyimana DE (2014). International Donors' Obliviousness to Human Rights Violations and Lack of Democracy in the Disbursement of Aid: A Case of Post-Genocide Rwanda. *Journal of Asian and African Studies*. Vol. 1, pp1-17; Gaddis JL (2005). The Cold War: A New History. (pp 256-7). New York: Penguin; Brown S (2005). Foreign aid and Democracy Promotion: Lessons from Africa. *European Journal of Development Research*. Vol. 17, p181 and Makinda SM (1996). Democracy and Multi-party Politics in Africa. *Journal of Modern African Studies*. Vol. 34. Pp555–573.

42 See Kavuro C (2013). Reflecting on Refugees and Asylum-seekers Tertiary Education in South Africa: Tension Between Refugee Protection and Education Transformation Policies. *Global Education Magazine*. Vol. 4. p23, states that Dr. Mangosuthu Buthelezi, former Minister of Home Affairs believed that the social and economic transformation would not be possible if non-citizens who were and are admitted within South African borders are allowed access to the national resources. This belief is shared by many others such as Ms Maggie Maunye, former Chairperson of the Portfolio Committee on Home Affairs who stated that non-citizens prevent South Africans from enjoying the fruits of their freedoms and Ms Fatima Chohan, Deputy Minister of Home Affairs, who stated that given the huge influx of individuals abusing the asylum management system, the state cannot allow refugees' access to national resources until the asylum system is reviewed and strengthened to ensure bogus asylum-seekers are detected, including the reviewing of the cases of those who were granted asylum.

43 See UNHCR Global Trends (2011). A Year in Crisis. Geneva, p3,40.

44 See UNHCR Global Trends (2013). War's human Cost. Geneva, p3,42.

45 Kavuro op.cit. (n42 above) p23 states that there are policy shifts in the immigration and refugee policies towards restricting economic migrants and refugees from entering South Africa and from accessing socioeconomic rights. See too Lawyers of Human Rights Policy (2013). Shifts in the South African Asylum System: Evidence and Implications. (p3). Pretoria: The African Centre for Migration & Society; and Scalabrin Centre v Minister of Home Affairs 2013 (7) BCLR 819 (WCC), para 105 (the state acknowledged that the idea of relocating the Refugee Reception Offices to ports of entry near South Africa's northern borders was a policy shift in refugee policies).

A VOLUNTEER EXPERIENCE IN GHANA

Abstract:

I arrived in Ghana unsure of what to expect. I had done little research on the country and was completely unaware of the culture that I was about to become immersed in. I had arranged to volunteer with a local non-profit organisation, but I had absolutely no idea what sort of project I would be working on. I went into this experience completely blind, and as a result I was amazed and overwhelmed by my experience in Ghana. After an orientation day spent exploring national landmarks, local markets and impoverished neighbourhoods, I was thrown into a teaching position and given a few of my own classes. The days and weeks that followed were a whirlwind of new experiences and learning that would stay with me forever. The people that I met, the children that I taught and the volunteers that I worked with have left me in awe and completely inspired.

Keywords: Volunteering, Ghana, Africa, Teaching, Orphanage.



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I t's the middle of the day, and in Ghana that means it is very hot. I am running down an uneven dirt road as fast as I am able, completely drenched in sweat. I struggle with a heavy sports bag, shifting its weight every minute or so from one shoulder to the other, occasionally dropping it down into my hands to give my back some respite. I look up. The heavy storm clouds are rolling in fast.

I cannot help but laugh at the situation as I attempt to race home before the storm inevitability hits, bringing with it the heavy tropical rain. I pass a group of old ladies sitting in front of their shop. We would usually exchange pleasantries as I pass, swapping between English and the five words that I could speak in Ga. They take one look at me and fall about laughing, clearly amused by the silly 'Obruni' trying to outrun the rain. I will get this reaction from just about everyone that I pass on the two kilometre journey between the school and the volunteer house.

Halfway home, a taxi pulls up beside me and the driver leans forward to talk to me through the passenger window. Seeing my predicament, he smiles broadly as I tell him that I need to go just down the road. Holding back his laughter, he tilts his head back and offers me a price five times higher than what I would usually expect to pay. I laugh, impressed by his boldness, thanking him for his time as I return to my painful rush home.

I turn down a path that runs between a creek and some family homes. I run past some goats and chickens that are let lose on the path. The wind picks up. A sudden flash of light is followed by rumbling thunder, and within seconds the downpour begins with full intensity. I hunch forward over the bag, using my body as a shield from the rain. I shuffle along slowly now, my back aching unforgivingly as I battle through the last few hundred metres.

How did I find myself in this situation? Earlier this year I spent two months volunteering in Ghana. The organisation that I worked for, **Dream Africa Care Foundation**, had several ongoing projects working with children in the local area. When I arrived, there was an unfortunate lack of teachers, so I found myself teaching my own class at a local school.



The school facilities were basic to say the least. A dirt yard was surrounded on three sides by wooden shacks that served as classrooms. The classes were small, but with only a blackboard separating the rooms lessons were often loud and full of external distractions. The headmaster sat by the small canteen area, overlooking the whole school and keeping the children in line. A small fire would usually be burning in the corner, an unfortunate solution to garbage disposal. There were no bathrooms. Despite such humble conditions, the children were always in amazing spirits.

With literally no teaching experience or qualifications, I will admit that at first teaching seemed pretty daunting, though this feeling passed in a matter of days. The kids were amazing. They responded enthusiastically and respectfully towards me and every area of study in class.

I began teaching maths, the subject I felt most comfortable in, and was immediately impressed by the capability of the class. Despite the many educational disadvantages these children had faced, they were extremely fast learners and could absorb and apply new information very easily. Within those first few days, I became more and more impressed with my class. Their attentiveness, eagerness to learn and continuous excitement at my mere presence made my time teaching amazing. From my first day with that class, I loved every moment of teaching.

It was during my first week at the school that I approached one of the head teachers, who I only ever knew as Madame, asking which subject I should teach that day. She handed me an IT book and asked that I teach the children about computers.

I began the class that day talking about the difference between hardware and software. As always, the students were trying their best to learn as much as possible, but there was a distinct barrier preventing the class from understanding the topic at hand. I asked the class if anyone had ever used a computer before. The kids jumped up excitedly, telling a story about a class trip to the local internet cafe. I

questioned further only to discover that, while everyone had been on this class trip, not one student had ever actually used a computer before.

These children were growing up completely removed from an integral part of the modern developed world, and as such would be severely limited in their capacity to seek a higher level of education. While the reality of career and education prospects for many children in Ghana had already begun to sink in, the fact that these children were not exposed to technology on any level certainly affected me deeply. In the short amount of time that I had been their teacher up until this point, I had seen many signs of great intelligence in several students, and it troubled me greatly that even the smartest students in this school might never be given the opportunity to realise their own potential.

I set out upon my own personal mission, and began fundraising with friends and family back home. Within a few short weeks enough money had been raised to buy three laptops that would be used by the volunteers as an educational tool for children in the care of Dream Africa Care Foundation.

I will never forget the first day that I brought the laptops to school, the class was buzzing with excitement and curiosity at the sight of the mystery sports bag strapped over my shoulder. When I began explaining the rules about acceptable behaviour in a computer lab, they began shouting and dancing around the room. Eventually they settled enough for the laptops to be distributed between small groups. For the next

three hours the whole class was transfixed to the point that we completely skipped recess without even noticing. Basic computer skills were picked up rapidly with the aid of some mathematics and spelling games, and it didn't take long for the students to find that innate spark of curiosity that children in the developed world seem to have when it comes to technology. Within that first lesson, the class went from being completely boggled by the touch pad to racing through the icons in search of new entertainment and stimulus.

Interestingly, it was only after purchasing the laptops that I learned that having



computer skills can drastically improve employment opportunities for locals in Ghana. As computer skills are perhaps not so common, those that have a good understanding of how to use computers will be able to find better paying work much easier. With this in mind, I believe that exposing children to technology on a regular basis seems like a good way to increase their opportunity for further education, or at the very least expand their job prospects for when they finish school. All these children need is opportunity.

Opportunity. That is what is lacking for these children. They have the desire to learn, to move towards their potential. They have the ability, the inherent intelligence that would allow them to succeed in life. I was reminded of these traits on a daily basis.

Every day my class would dance around and get excited when I arrived at school, not because I was anyone special, but because my arrival meant that they had a teacher for the day. When teaching a new topic, the students would never hesitate to ask me questions to make sure they understood. When teaching geography, the class would crowd around the world map trying their best to make sense of it. When teaching mathematics, the capable students would beg for harder questions. No matter the topic, the children wanted to learn. They wanted to do better.

Their intelligence surprised me no end, simply for the fact that they had faced numerous obstructions in gaining an education so far. I was teaching long division one day, a subject that I had never really understood myself as a school student, and once again the class impressed me with their quickness of ability to understand concepts. In fact, a few students excelled, managing to tackle harder questions. One girl was miles ahead of the class, and would fly through the questions faster than I would find time to mark them. At the age of only eight, this student was the youngest person in the class, yet was undoubtedly one of the brightest. It was a wonderful to witness such intelligence, but also it was a heavy moment, realising how gifted this young girl was. In a different setting, her intellect would be identified; she would be placed in an accelerated class and would be given every opportunity to further her education. But in Ghana, in an underfunded, understaffed local school, it was much more likely that such opportunities would never be afforded to her. Her potential would probably never be realised, simply for the lack of opportunity. I still struggle to come to terms with the harsh reality.

While the lack of opportunity is perhaps the greatest obstacle in improving education in Ghana, it is also a gift that can very easily be given as a volunteer. These children have the potential, the intelligence and the desire to learn. The only thing that they need in order to succeed is exposure to knowledge and ideas. Offer these students this, and the rest will happen organically.

I first realised this truth teaching at a nearby fishing village. Every afternoon, after school, a small group of volunteers would head out to a seaside community to provide the children in the area with the opportunity to improve their learning. We taught in this suburb for the simple reason that it was one of the worst performing regions in Accra in terms of academia. We had no facilities to teach in, so every afternoon we would drag blackboards, tables and chairs out of a storage room and teach in the street. Classes varied in size day to day, but the constant onslaught of distractions meant that classes were usually a bit more difficult to manage.

Despite being late in the afternoon, the sun would feel hot. Yet when the sun eventually fell over the horizon, it would become too dark to teach. The dusty road would be kept relatively clean, though a quick look towards the ocean would provide a view of mountains of garbage lining the nearby coastline. The air would be heavy, thick with too many smells to recognise. This would be the setting for my afternoons in Ghana, but for the children in my class, this was their world.

During a class one afternoon, I was teaching multiplication to a small group of students. Despite all being in the same class at school, their skills and understanding ranged between two extremes. I tried as always to cater for this disparity, providing practice questions of varying difficulty. I was doing my usual loop of the table of students when I found a girl, hunched over her book, defeated. I asked her what was wrong, and she explained that it was impossible for her. As far as I could tell, she had missed out on learning the basics, and ever since had feigned understanding, and thus was being left behind.

I gave the class work to do, then sat down and tried my best to explain the basic concepts that she had missed. I showed examples and drew solutions, hoping to create some clarity. I left her with a simple question, two multiplied by three, and she busied herself away trying to solve it. A minute later she ran up to me, shoving her book into my hands excitedly. I gave her a tick and another question, and again a minute later she ran up to me, eager for me to mark her work. It went on like this for the rest of the lesson, I would write her a question, she would scurry off to solve it then rush back proudly with the answer. By the end of the day she had gone from a complete lack of understanding of the topic to being able to solve six multiplied by

seven. This girl would normally hide her work from me, ashamed of her ability, but that day she was full of pride and excitement. I could not have been happier that day.

Basic mathematical skills are a necessity in Ghana for any sort of work besides manual labour, so helping children tackle even basic concepts can help them find decent work in the future. For this reason, I felt as though I had contributed something of worth to this child, and yet it cost me so little.

I think, in talking about doing volunteer work, there is often a great emphasis placed on how rewarding and fulfilling volunteer work can be. While this is certainly true, and by no means a bad thing to discuss, I think it is perhaps more important to highlight the impact that volunteer work can have on local communities and the people within those communities. As rewarding as it was teaching multiplication successfully to a struggling student, that child will benefit so much more from gaining that skill than I ever could from sharing it.

Of course, knowledge is not the only gift you can offer as a teacher. The young students that I worked with learned very quickly, but were also so easily inspired and filled with wonder. During a geography lesson, learning about oceans and continents, it became apparent that most of the students had never seen the ocean. The school was only two kilometres from the coast, so this troubled me. If these children were so rarely given the opportunity to leave their immediate surroundings, then their goals beyond living in their suburb surely could not feel real to them. I had students who imagined themselves becoming doctors, fashion designers and nurses. They fantasised about seeing other countries, often asking questions about Australia and other countries I had seen, yet they had never even been taken for a walk down the road to see the ocean.

A friend had made the same discovery with his students, so we joined classes one day and went for an excursion to the beach. Of course, classroom management skills count for nothing when twenty excited children are about to see the ocean for the first time, so to say the day was filled with shenanigans would be an understatement. Challenges aside, it was a great experience. The kids were filled with wonder and excitement as they raced around the sand. We managed to reign them in for a twenty minute lesson before letting them run around by the water. The 'no

swimming' rule that we tried to impose was quickly translated to permission to roll around in ankle deep water, despite wearing their full school uniforms. They played games and splashed around, posing here and there for the occasional photograph. It was a day that the children won't soon forget.

On the walk back, I talked to one of the older girls in my class who had previously been so scared of the beach that she had tried to get out of the excursion. It took some convincing and promises to get her to join us that day, and in the end she had had a wonderful time. I asked her if the ocean was as scary as she thought it would be. She looked up at me, smiling, and told me it wasn't. It may not sound like much, but to me that was a perfect moment. Her view of the world had changed slightly.

Ten minutes later I fell in a hole in the road, known affectionately as an 'Obruni trap', twisted my leg and smacked my knee against the pavement so hard that I couldn't walk properly for two weeks. And still, the strongest memory I have of that day is of the young girl, looking up at me, telling me she had overcome her fear.

While I spent my days teaching, hoping to assist in the education of these young minds, other volunteers worked in many other projects across Accra and Ghana. Teaching, to me, seemed very important, but there are many other problems faced by communities in Ghana. It was always inspiring to hear what other volunteers were accomplishing in the face of different challenges.

During my short time in Ghana, the local orphanages we worked with underwent dramatic improvements. Wooden classrooms were built on the premises; teachers were hired; foam mattresses on the floor were replaced with bunk beds; fans were placed in each bedroom to decrease heat rashes and mosquito bites; health insurance was purchased for all the children; grey walls were painted colourfully; photos were spread throughout the bedrooms; seeds were purchased to help grow food; chickens were purchased to provide eggs; clothes were provided to break the hand-me-down cycle, and the children were all taught basic hygiene skills.

All these initiatives, and many more, came from volunteers. Everyone that I worked with had so much to bring to each project, and I became inspired by their work on a daily basis. Everyone had a great capacity to make a real difference.

I am unsure of the extent to which I was able to help my students in their education. I cannot know if I managed to inspire any of them to seek further education. I cannot know whether the laptops will make a difference. I cannot know if anything I did will affect their lives in any significant way beyond the time I spent with

them. I do know, however, that as long as there are more volunteers, more people trying to help these children, that a real difference can be made. As long as these children are exposed to new opportunities to learn, they will get closer and closer to reaching their potential. Seeing the potential in these children is among the most inspiring things in the world.

Of course, beyond the seriousness of providing opportunity to these amazing children, there are special moments to be treasured forever. It was a hot day, and my students were exhausted from the lesson so far. They soldiered on nonetheless, though I could easily see that no more learning could be done in the remaining half and hour of class. I finished the lesson early that day, then set about trying to keep the class occupied during the time before lunch break. I ended up showing a couple of students a simple coin trick, nothing fancy, and the kids loved it. Within minutes the whole class began jumping about excitedly, begging for me to teach them the tricks.

The lesson flew by, and by the end they were all practicing with coins of their own, trying their best to fool each other. When the time came for me to leave, I realised that I had lost a coin, a fact that troubled my class greatly. I assured them a dozen times over that it didn't matter, and that they should continue having fun, but it was too late. They all began searching the room, adding up their own coins and trying to account for my missing coin.

One girl approached me, telling me she had found my coin, and the rest of the class backed up her statement. I looked at her, trying my best to read the situation. I counted the coins in her other hand and realised that she was one coin short. She was offering me her own money so that I would not be at a loss. After much insistence, the girl sheepishly accepted her coin back.

What followed can only be described as bedlam. Students would run up to me in waves, falsely claiming to have found my coin, while other students would sneak money into my pockets. As I headed for the exit of the school, my class were holding my arms trying to pull me back, completely determined to have me accept their money to pay for my small loss. I have never felt so humbled.

Despite having so little, my loss became their loss. They gave to me freely, what little they had, in the belief that they could only be happy if they knew I was happy.

If only this attitude was more apparent in the developed world. There is so much need in the world, but there is also so much capacity for people to give.





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Global Citizenship Education Section

A Brazilian View on Global Citizenship Education



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Centro de Criação de Imagem Popular, Brasil. (With gratitude towards Claudia Ceccon, whose critical comments much have contributed to enrich this article).

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Human Consciousness & Values for Solving Global Problems



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EDUCACIÓN PARA UNA CIUDADANÍA GLOBAL GLOBALES LERNEN



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A Brazilian View on Global Citizenship Education

Abstract: This article is an improved and expanded version of a presentation made at the Journée Educasol “L’Education à la Citoyenneté et à la Solidarité Internationale: Une nécessité sociale” – January 29th 2015, in Paris. It starts by presenting the global citizenship’s features that in our view are more aligned with Brazilian society’s present needs; then it shows some examples of how Brazil builds local and global citizenship through formal and non-formal education processes. It shares some practices in Global Citizenship Education developed by Brazilian Ngo CECIP and concludes with reflections on the challenges to be faced in order to disseminate Global Citizenship Education in Brazil.

Key words: Global Citizenship; Education for Global Citizenship, Sustainability; Social change, Transformation



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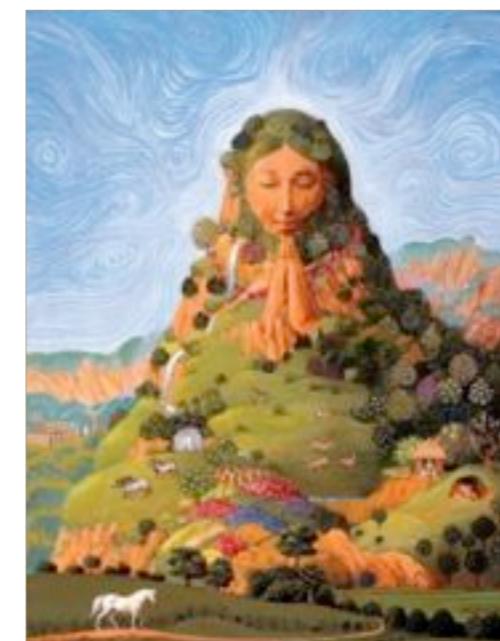
1- Why Global Citizenship should thrive in Brazil?

Global Citizenship (GC) has many definitions. At CECIP we use to say that it is the ability of perceiving global interdependencies, valuing diversity, understanding that all living beings are interconnected and acknowledging that people from all over the world belong to the same race, the human race; to the same family, the human family. Global citizenship, in the perspective of those who want a fair peaceful sustainable world implies to demonstrate, through actions, that one has learned to live together and to cooperate local and globally, aiming to overcome violence, racism and social economic environmental injustice. Of the many aspects of GC, the most aligned with Brazilian society’s present needs are, in my view, its power to foster democracy; to rescue ancient sustainable values and skills that contributes to restore Indigenous and Afro Brazilians pride; to promote the link between critical thinking and empathy that leads to transformative actions.

- **GC flourishes in democracy and fosters democracy**

It is no coincidence that Herodotus, the Father of History, probably the first human being who, due to his drive to go beyond the limits of his own culture, could be called a *global citizen*, has lived in ancient Greece, the place where humanity has experimented democracy for the first time. Free circulation of people and ideas usually produces a deep curiosity about people from different cultures and the interest in learning with them- a characteristic of Global Citizenship. Authoritarian regimes – such as those Brazil has suffered for most of its history - do not like questions, hate curiosity and usually suffocate local, not to mention global citizenship. Now Brazil is learning how to exercise democracy while criticizing its limits. Interactions with other countries also unsatisfied with their democracies enhance mutual learning. This is Global Citizenship in action.

- **GC rescue ancient sustainable values of indigenous and African communities, strengthening the fight against racism**



In a global event organized by DEEEP [\(1\)](#) in Czech Republic (Summer School 2012) the first keynote speaker, who had just returned from the Rio+20 Conference, said a phrase that was quoted by the participants all over the meeting: *“If you want to know how to overcome the sustainability crisis, ask your grandmother”*. She was referring to our ancestors: even if traditional communities could be belligerent, and the *good savage* was a myth, they had a sustainable relationship with their environment. Ancient communities, in all parts of the planet, developed similar myths expressing the awareness that we are all children of the Earth. Indigenous people from the Andes region call the Earth *Pachamama*. Unlike humans, *Pachamama* has her own self-sufficient and creative power to sustain life. (See more in

<http://info.handicraft-bolivia.com/Pachamama-Mother-Earth-a346.>

In Brazil, we descend from a White Father- the colonizer- who imposed himself over our Indigenous or African Mothers. Long ago, these women knew that problems arise when people take too much from Mother Earth. In their communities, despite of their many shortcomings, power was equally distributed, conflicts solved in a circle with dialogue, cooperation was the rule and the collective interests were the priority. Those essential features of our black and indigenous mother's culture, once despised by representatives of the patriarchal White Christian Civilization, are now seen as parameters to organize our Civilizations in a sustainable way. It has been adopted by global citizens everywhere. This is Global Citizenship reinforcing indigenous and Afro Brazilian's pride that was crushed by the European colonizers, while reinforcing the Brazilian quest for a new economic model that stops to destroy our forests and poison our rivers. For a new culture where punitive retributive justice is replaced by the understanding of the causes of violence and its elimination. For a united country with no traces of racism or discrimination against any population.

- GC implies critical thinking meeting empathy and solidarity, resulting in sustainable actions ("el Buen Vivir")

Global citizens around the world are turning to traditional communities to learn "El Buen Vivir", a life philosophy that implies to live in harmony with Nature and with the Other, eating well, loving well, working with joy, dancing, meditating and dreaming- because everything

begins with a dream. Equatorian Educator Rosa Maria Torres offers a variety of sources to explore this concept in
<http://otra-educacion.blogspot.com.br/2014/07/lecturas-sobre-el-buen-vivir.html>.

Quoting the "Seven Social Sins List" published by Gandhi, in his weekly newspaper *Young India* on October 22, 1925, "Science without human commitment is unsustainable". Critical thinking alone does not produce actions that lead to *El Buen Vivir*, with more harmonic interactions of human beings with each other and their environment. And without empathy and solidarity, a correct analysis of the causes of an unfair reality will not awake the willingness and determination to change it.

Recent Brazilian social policies such as the "Bolsa Família", that seem to be based in a combination of critical thinking and attitudes of empathy and compassion, reduced poverty drastically and eliminated hunger in the country.

However, a shameful concentration of land and wealth continues to exist, and the environment continues to be destroyed (2). When Brazil – and the world- have adopted an economic model coherent with the principles of *El Buen Vivir*, humanity will have finally put in practice the promises made in the 1945 Universal Declaration of Human Rights - and global citizenship will be an universal reality.

2- Building Local and Global Citizenship in Brazil through Education

- **Formal educative processes**

Some of the principles of an Education for Global Citizenship are registered in the Brazilian National Parameters for Education (Ministry of Education, 1997):...education in schools must make possible to the students "*build tools to understand reality and to participate in large diversified social and cultural interactions that are the basic conditions for exercising citizenship in a democratic inclusive society*" (Introd., p. 45) (...), taking into consideration "*issues related to globalization, scientific and technological transformation and the discussion of society's ethical values*" (idem, pg 47). However, to implement either Citizenship Education or Global Citizenship Education approaches in schools implies the existence of good quality education, still scarce in Brazil.



Most classrooms are boring or chaotic places- usually meaningless for both students and teachers. (3)

Remarkable characteristics of Brazilian culture, such as creativity, joy, solidarity, excellence in music, dance, art, sports, are absent in most schools. The learning of sustainable attitudes and values is less present in schools than the learning of cognitive skills. However, we can see exciting transformations in progress. Many civil society organizations such as Palas Athena Foundation www.palasathena.org.br/, Paulo Freire Institute www.paulofreire.org/, Roberto Marinho Foundation www.frm.org.br/ and Cecip, among others, are collaborating with Ministries of Education at central and local levels and preparing educators to introduce in the curriculum the best of Brazilian cultures as well as the global planetary dimension expressed in the Universal Declaration of Human Rights (United Nations, 1945). Connections, not only with the resources of their local community but also with those of the world, are stimulated.



In Oi Kabum, Escola de Arte e Tecnologia (Oi Kabum – Art and Technology School) CECIP works with public school's youths who realize their own social intervention projects using ICT and return to their schools to share what they've learned.

Internet in schools, of course, has been facilitating the process. A search in the Internet allows students to find information on any given theme, coming from different sources, analyzed in different perspectives. It allows collaboration between people. And it is at reach of almost any Brazilian urban student, representing a

powerful example of how collective intelligence works. Internet has made possible for any person to learn whatever he or she is interested, anywhere, whenever he/she wants. The conflict between this new flexible horizontal autonomous way of learning and the ways traditional schools impart knowledge, is helping to change obsolete paradigms. Also, Internet allows the creation of teachers and students networks at local, national and international levels, uniting schools driven by principles of horizontal interactions between *learners who are also educators and educators who are also learners*, such as the Rede Mundial de Escolas Democráticas (Global Network of Democratic Schools <http://www.democraticeducation.org/>). Innovations are disseminated on the online versions of educational magazines such as Patio (<http://www.grupoa.com.br/revista-patio/Default.aspx>), Nova Escola (<http://revistaescola.abril.com.br/>) or in online magazines such as Porvir (<http://porvir.org/>).

• Non formal educative processes

At CECIP, professionals involved in educational change processes strongly adhere to the African concept of UBUNTU, which is implicit in the concept of "Educative City": "*we are what we are because of what all others are*". Education happens not only inside schools but also outside them. All spaces and adults (in a family, school, city, country, world) are preparing the new generations either for sustainability and happiness or for its contraries.

The forces of prejudice and intolerance continue to act relentlessly, it is true. But, gradually the awareness that Brazil belongs to all the Brazilians and racism, the cruel heritage of colonial times, must disappear increases. Also the awareness that we are part of a global civil society without borders starts to expand from the limited circle of intellectuals, artists, scientists and social activists where it was already present, to include larger and larger layers of our society. An indicator of this are the Samba Schools that during Carnival may transform global themes in songs, allegories and dances that stimulate millions of people to know more about Brazil and the world's history, realizations and challenges.

This Samba School was considered the best in the 2015 Rio's contest. It had as a theme Equatorial Guinea. The polemic about this Samba School being financed by the dictator who governs this extremely poor country has been a source of political education in global citizenship.



Free cultural events, such as Art's Biennials exhibitions of famous artists of all continents, Cinema, Theater, Music and Dance International Festivals are great channels for non-formal dissemination of Global Citizenship values, mainly in respect and appreciation of cultural diversity. Sports events such as the Soccer World Cup or the Olympic Games increase face to face contact between Brazilians and foreigners, and amplify the debate around corruption and disregard for human rights in the implementation of these events – a debate in which the global dimension cannot be eluded. Solidarity economy, restorative justice, culture of peace and non-discrimination, defense of indigenous populations, democratization of the media, free Internet, ecology, are other educative planetary movements also present in Brazil. International solidarity between Brazilian social movements and their counterparts abroad increases their power to press the Government for good quality public policies in all fields.

International solidarity with Indigenous associations and with Brazilian social movements and organizations that support them, makes life more difficult for those who covet their land or grab it using violence.



Some lessons can also be learned through the media that exposes the viewers to a great diversity of cultures. The awareness that people from all nations share the same humanity increases, as the general population is shocked and moved by images of mothers, in Brazil and around the world, who are losing their children to a violence that only makes sense to the weapons' industry. Moreover, international friendship can be an excellent teacher. Tourists or immigrants are unveiling unsuspected perspectives as Brazilians discover they can communicate with them even without knowing their languages.

3- CECIP: social agents transform the world, starting with their backyards

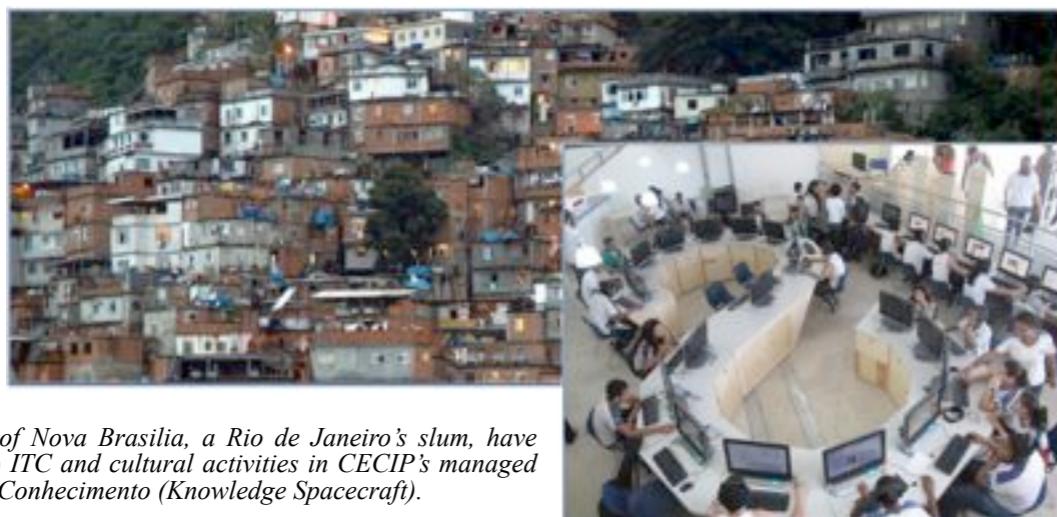
"Be the change you want to see in the world". CECIP, a not for profit civil society organization, follows this principle formulated by Mahatma Ghandi. It supports educators, young people and community members who are willing to improve the quality of their lives and the quality of their local realities. CECIP was created in 1986, (when Brazilian democracy was resurrecting after twenty years of a fierce right wing military dictatorship), with the mission to help the new born democracy to grow, through popular communication and education. CECIP invests in democratic educational processes, both formal and non-formal, at service of the interests of large segments of the population whose rights are not respected.

One most important target is good quality education, in which educators and community members are also learners, children, adolescents, youths have their voices heard, and all of them can act as change agents, as active citizens. In this way, CECIP develops educational tools and processes aiming non-discrimination, sustainability and a culture of peace.

Working in partnership with governments, community associations, Brazilian and international organizations, CECIP uses approaches based in Paulo Freire's Pedagogy of Autonomy. (Freire was a member of the group of intellectuals and artists who founded CECIP). Its projects invite participants to think critically about their own reality- what Freire calls "reading the world"- envision ways to change it - and act. Art,



Internet and Communication Technologies are resources used in the process.



Citizens of Nova Brasilia, a Rio de Janeiro's slum, have access to ITC and cultural activities in CECIP's managed Nave do Conhecimento (Knowledge Spacecraft).

The actions developed by change agents in crèches, schools and communities are evaluated, registered and disseminated by CECIP in books and Manuals in which the social technologies are made available, to be recreated. Examples are documents such as:

- *Paz e Movimento* (Peace in Movement www.cecip.org.br/site/paz-em-movimento/), reporting how students of schools plagued by violence learned to manage conflicts;
- *De mãos dadas por uma creche de qualidade* (Holding hands towards a high quality crèche www.cecip.org.br/.../publicacao-de-maos-dadas-por-uma-creche-de-qualidade), about how principals working in crèches located in a favela were engaged in the transformation of the educational atmosphere of the institutions they led;
- *Ideias, Sonhos e Histórias – cultura digital em Nova Brasília* (Ideas, Dreams and Stories- digital culture in Nova Brasilia) describing how CECIP manages pedagogically a space for living together and learning built by Rio de Janeiro municipality in the middle of a troubled poor community. www.pracadoconhecimento.org.br/novo/pracas-e-naves/nova-brasilia.

Between 2010 and 2012 we've participated of the Global Curriculum Project – www.globalcurriculum.net - born in the context of the Development Education Exchange in the European Project- DEEEP platform and its Summer Schools, spaces where educators from the global North and the Global South could establish an horizontal dialogue promoting mutual learning. CECIP worked in partnership with NGOS of other four countries, three in Europe and one in Africa. Brazilian teachers discovered that to adopt the Global Citizenship Education perspective made their lessons more meaningful to all involved. The process resulted in small projects led by students, in which knowledge they've build in the classes was used to transform schools and communities. They were registered in the *Manual do Curriculo Global- formando cidadãos planetários em escolas brasileiras* (Global Curriculum Manual- forming planetary citizens in Brazilian schools, CECIP, 2012, www.cecip.org.br/site/manual-do-curriculo-global/).



Colégio Bandeirantes (<http://colband.net.br>), one of the 6 Brazilian schools that participated of the Project, already focused the formation of global citizens before the project and reinforced the global dimension of the curriculum afterwards.

Links were created not only between Brazilian educators but also between them and their foreign counterparts. For many Brazilian teachers, participating in the Project was a unique opportunity to be

presented to Benin, the country from which most of our African ancestors and significant dimensions of our culture came. This video made by Brazilian educator Débora Maria Ma-

cedo (<https://www.youtube.com/watch?v=tcbGEgXSopk>) resulted from the visit to Benin and shows students from this country and Brazilian students singing songs that were sent to their counterparts in Benin.

Nowadays CECIP Brazil and Nego Com from Benin, with the support of Leeds DEC from England, are looking for resources to finance a joint Global Citizen Education project.

4- Opportunities and challenges to disseminate Global Citizenship Education in Brazil after Incheon/2015

In May 2015, Chiefs of State and Ministries of Education of the UN countries, as well representatives of global civil society organizations, universities, entrepreneurs and media will meet in the city of Incheon, South Korea, to discuss and firm a commitment with the realization of the 4th Sustainable Development Goal of the post 2015 Agenda: *Ensure inclusive and equitable quality education and promote life-long learning opportunities for all.*

The 7th target of this goal is: *by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, (the underline is mine) and appreciation of cultural diversity and of culture's contribution to sustainable development*

After the Conference, it will be the responsibility of both Government and Civil Society to make this objective (and all its targets, including target 7), meaningful and attractive both to the country's formal educational systems and to entities in charge of non-formal education initiatives.

In Brazil, questions will emerge, such as: *What is global citizenship and sustainable development? Why Brazilian education should promote global citizenship? Is it not absurd to speak about global citizenship in contexts where people do not perceive themselves as belonging to groups such as school and community, cannot locate their communities in the city, and are not aware they have rights and duties as national citizens? What kind of resources teachers and schools need to be able to ensure all learners acquire knowledge and skills associated to global citizenship?*

Those questions shall be answered in a collective way by different segments. It will be challenge and at the same time a great opportunity to renew and reinforce the commitments of the Education for All Campaign, launched in Jomtien, Thailand in 1990 with an enlarged conception of Education that goes beyond schools to include non-formal education processes (4)

Of the long list of tasks that may lie ahead, let's examine three:

- **To create a common understanding around words such as “global”, “development” and “sustainability”**

Probably the word “global” will arise fierce polemics, since in Brazil it is associated with the predatory globalization in which it is inscribed the colonization imposed by the Europeans upon other peoples in the planet, that was initiated in the 15 th/ 16th centuries and only ended in the 20th century, when the last African colonies conquered their independence. Moreover, “Global” and “Globalization” bring to mind the suffocation of local cultures by a dominant one, with the subtle imposition of an only way to think and to see the world. Until recently, the expression *global citizen* or *citizen of the world* would elicit only this image in Brazil: a person, usually from the white élite, who travels a lot, knows many languages, and can quote authors from different times and countries... It will be necessary to explore the new meanings of these

old worlds, or as poet Caetano Veloso says, to find *Outras Palavras* (“other words”). Instituto Paulo Freire, for instance, has been working with the concepts of *Planetary Education, Eco Pedagogy* and *Planetary citizenship*, instead of Global Education and Global Citizenship. CECIP, when coordinating in Brazil the *Global Curriculum Project*, added the words “for sustainability” to “*Global Curriculum*”. Even so, the word “Global” has generated noises in the communication with teachers and created initial mental blockages. The concept of *sustainable development* is being criticized, in Brazil and in other Latin American countries, since the word *development* is impregnated with the idea of a dichotomy between developed and underdeveloped countries, ignoring the existence of islands of poverty in the wealthy nations and islands of wealth in poor ones, and also implying that the so called developed countries, with their unsustainable patterns of consumerism, were a model to be followed.

- **To map already existing initiatives in which the global dimension is present**

Going beyond important semantic disputes (language creates reality, say the linguists), to disseminate Global Citizenship Education approaches in Brazil will demand to map the already existing initiatives in formal and non-formal education, in which the global dimension is present. They are a multitude of them that may call themselves *Education for Peace, Values, Sustainability, Democracy, Diversity, Citizenship, Human Rights* etc, and are scattered all over the country in the formal educational system and outside of it. A common framework among all these initiatives may be found. Analyzing some of these “tendencies of education with an explicit purpose attached”, Harm –Jan Fricke and colleagues identified four commonalities: a global orientation; a pursuit of personal and societal transformation; a methodology for transformation and overlapping content. It will be interesting to investigate to which extent the global orientation is a prominent characteristic of Brazilian Education for Peace, Education for Sustainability, Education for Non Discrimination and so forth. (5) This global orientation implies to study similarities and differences between people, societies and economies in different parts of the world. It also implies dealing with issues that affect all societies, such as: violence, poverty or environmental change. It also means to enquire into the global dimension of local phenomena, fostering a perspective and a disposition that takes into account the potential global consequences of personal or local actions. Finally, it means to use a global system approach to explore issues such as trade, ecology, power relations, and laws. (Fricke, Gathercole Skinner- Monitoring Education for Global citizenship- a contribution to the debate, DEEEP – Concord, 2015)

- **To think “transformation” in a systemic way**

Networks of institutions and individuals could be created, focusing the transformative nature of Global Citizenship Education, as defined by DEEEP: ‘*Education for Global Citizenship is based on an understanding of the purpose of education as going beyond the acquisition of knowledge and cognitive skills, to transforming the way people think and act individually and collectively.*’

http://deEEP.org/wp-content/uploads/2014/07/The_Brussels_Proposal.pdf

At this point, when I talk to my colleagues working in schools and/or universities, many of them are skeptical about the relevance of education for global citizenship in Brazil when the endeavor of educating all Brazilians to act as citizens in their schools, communities, cities is not completed. Many argue that first you become a local citizen, and only then you could be educated to be a global planetary one. However, transformation do not always occur in a logical, sequential fashion: “Transform yourself, then the school, community and only then you will be able to contribute in the transformation of the city, country, and last, the world”. All

these systems are connected and influence each other. The individual is not an island but a *being of relationships*. Therefore, you transform yourself while changing your interactions with other individuals and systems. In this way to insert a global dimension in education for citizenship (or for peace, sustainability, diversity and so forth) can actually reinforce the learning change process. This was experimented by the Brazilian teachers and students who participated in the Global Curriculum for Sustainability project. For instance, a group of students started by investigating a problem of violence and prejudice in their school. This involved self-reflection, interviews with several members of the school community, and also to compare the atmosphere of their school with the atmosphere of different schools, in Brazil and other countries. They've discovered similarities and differences between youth behaviors in different cultures – regionally and internationally, and became aware that the violence/ prejudice in school reproduced violence/prejudice in the city and in the world – and reinforced it. They discovered the leaders that in Brazil and the world fought against discrimination and tried to face violence in non-violent ways. While they were learning this, they were mastering curricular contents in Language, History and Geography. At the end, the students made murals and artistic interventions that were presented to the whole community.

To conclude...

In CECIP's perspective, Brazil needs to foster Global Citizenship Education – with whatever denomination it takes -, since its methodologies and strategies for active learning, racism/ sexism deconstruction, democracy reinforcement and *glocal* citizens formation make us more and more able to value and to use our great assets of joy, art, movement, ancestral sustainable values, attitudes and skills to increase our capacity to develop creative alternatives to unsustainable public policies.

The more Brazil becomes involved in processes of Global Education Citizenship, the more it will be able to contribute to local and global transformations, due to the talent of its people for finding creative solutions, think out of the box. This will enrich Global citizenship methodologies and diversity of approaches.



As Unesco celebrates its 70th anniversary, it is important to use Edgar Morin's principle of *organizational recursiveness* ("Each product /cause, produces or causes its producer/cause") to create a virtuous circle opposed to the vicious circle of violence we now experiment. In the present vicious circle, oppressive discriminatory policies produce violence, which justifies the creation of policies still more oppressive. A virtuous circle could be: Global Citizenship Education approaches reinforces, all over the world, practices that increase justice, sustainability, and peace. Those practices help Global Education Citizenship to evolve and diversify, which will produce practices and public policies more sustainable and fair.

NOTES

1-DEEEP- Citizens Empowerment for Global Justice- is a project of the DARE Forum of CONCORD, the European Development NGO confederation.

2-The 10% richer Brazilians have 49,8% of the national income;

The 10% poorest live with only 0,7% of the national income.

(PNAD IBGE Instituto Brasileiro de Geografia e Estatística (IBGE, 2013)).

Brazil has around 5 millions km² native vegetation and loses thousands of kilometers of vegetation per year because of the cutting of trees and fires. Only in the Amazon 18% of the original forest has been destroyed. (Instituto Nacional de Pesquisas Espaciais, 2014).

3-An indicator of this: research of the Instituto Nacional de Estudos e Pesquisas em Educação (INEP 2006) revealed that 1.5 million children (15-17 y.o.) did not attend school in the previous year. And the main reason was "lack of willingness to study" (40,4%). More than 60% of the youth interviewed in the research Profile of Brazilian Youth considered that the school is not aware of the current realities issues; 72% consider that the school is not interested in the problems of the students. 76% think that the school does not understand the students (Abramo & Branco, 2005).

4-In the article "Ciudad Educadora, una manera de vivir juntos", Alizia Cabezudo develops this issue. <http://www.hegoa.ehu.es/congreso/gasteiz/doku/Ciueduc.pdf>

5-In "Monitoring Education for Global Citizenship", op cit, Harm -Jan Fricke and colleagues call them "Adjectival Educations"

Human Consciousness & Values for Solving Global Problems

Abstract: Mother earth is considered as one of the most beautiful planets in the Universe. Earth is the only planet in our galaxy that has enough water and environment to support plant, animal and human life. Unfortunately global human society is suffering due to various problems, which should be solved before it is too late. Most of the problems are created and generated by the human, especially so-called civil society. Nature needs care and love and people must take care of our beautiful planet if human want to survive on the earth. Unfortunately directionless and purposeless technological and scientific developments damage nature and create the ecological and environmental imbalances. Climate of the world is changing very fast, catastrophes are taking place almost every day, unknown hazardous diseases are appearing every now and then. These are the consequences of irrational use of planet's resources. The only hope is that every person is capable of influencing the world in some way and that this influence would be positive. After all if we don't look after our planet we will die and humanity will disappear from the earth.

Keywords: global citizenship, universe, humanity, civilization, Earth, civil society, Education for All.



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Problems Facing Global Society: Critical Analysis

As we know that "Every year, six million children die from malnutrition before their fifth birthday. Every 3.6 seconds, about the time it'll take you to read this sentence, another human being has died of starvation. Five million people die from water born illness every year. Almost 40 percent of the world's population does not have basic sanitation and over one billion people still use unsafe sources of drinking water. HIV/AIDS takes the lives of 6,000 people every single day, as 8,200 more are infected with it. In Every thirty seconds, another African child dies of malaria, which accounts for the deaths of more than one million children a year. A woman in sub-Saharan Africa has a 1 in 16 chance of dying in childbirth. Her North American counterpart has a 1 in 3,700 risk. More than 40 percent of African women do not have access to basic education, although it's proven that if a girl is educated for six years or more, as an adult her prenatal care, postnatal care, and childbirth survival rates will dramatically and constantly improve. Educated women are more likely to vaccinate their children. Every minute, a woman somewhere dies in pregnancy or childbirth. That's 1,400 women every single day and 529,000 women each year dying from pregnancy-related causes. About five women have already died as you read this."¹

World Bank economist Jean-François Rischard² (2002) seriously argues that the next twenty years will be of critical implication to our planet. Resolution of global problems over the next years will determine the fate of our planet for the next generations. Rischard points out the twenty most pressing issues facing the global community. These are classified in three groups, one *Issues involving the global community* are global warming, biodiversity and ecosystem losses, fisheries depletion, deforestation, water deficits, maritime safety and pollution, second *Issues requiring a global commitments* are massive step-up in the fight against poverty, peacekeeping, conflict prevention, combating terrorism, Education for all, Global infectious diseases, digital divide, natural disaster prevention and mitigation and third *Issues needing a global regulatory approach* are reinventing taxation for the twenty-first century, biotechnology rules, global financial architecture, Illegal drugs, Trade, investment, and competition rules, Intellectual property rights, E-commerce rules, International labor and migration

Russian Philosopher Alexander Chumakov believes that "At the dawn of global civil society, the test for humanity is to achieve unity while preserving cultural differences as well as the distinctiveness of nations and peoples. Such unity can be reached only by recognizing human values, especially human rights. However, these rights must be strictly determined and more than mere obligations. Hence, the most important task for philosophy is to develop foundations and principles for a world society and to formulate a global consciousness and a humanistic worldview that adequately reflects the realities of our epoch. Our action must increasingly be based on an acknowledgment of global values."³

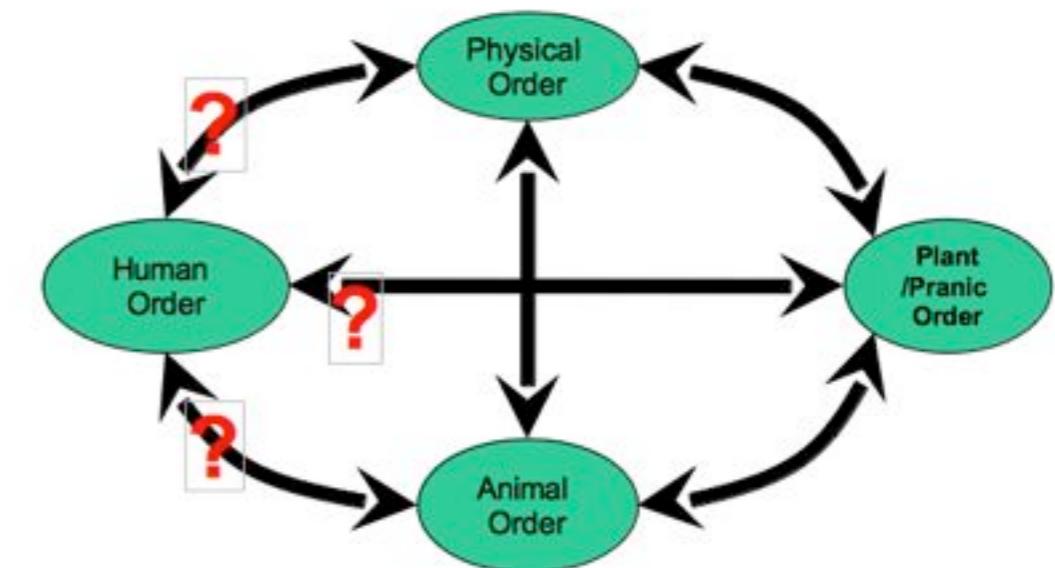
This evidence that human activities influence the global climate system continues to accumulate. Data indicate that Earth's surface temperature is rising. This increase can be attributed, in part, to human-caused increases in greenhouse gases such as carbon dioxide. It is becoming apparent that these climatic changes are negatively affecting physical and biological systems worldwide, Charles H. Southwick⁴ well known ecologist argues that how we as humans affect global ecosystems and how these changes impact our health, behavior, economics and politics.

Winfried K. Rudloff, Governors State University suggests, "On one hand, globalization in science and education is rapidly taking place on account of the World Wide Web and the Internet. On the other hand, such high technology-based education is still in its infancy and mostly concerned with run-of-the-mill subjects that lack focus on urgent global problems. Specifically, most urgent problems such as resource depletion, environmental pollution, over-population, deforestation, the Greenhouse Effect, unchecked militarism, and rampant nuclear proliferation are studied to provide our students with a better understanding of the complexity of these interrelated issues. They should learn how to analyze problems of global importance and find creative solutions. After all, they are the generation of the future which they have to shape through knowledge and state-of-the-arts skills."⁵

Solutions of global problems as suggested by most of the Secular Humanists to upholding and strengthening International law, application of the rule of law in combating terrorism, promoting secular values, laws and constitutions worldwide, asserting the rights of children to be free of religious indoctrination, rational solutions to global problems based on international cooperation, strengthening of the 'Kyoto Agreement' to provide an international carbon tax and the voice against unilateral pre-emptive military action, the policy of any country that seeks to promote a sectarian religious agenda, policies based on the presumption of religious superiority, theocracies of any kind, be they Judaic, Christian or Islamic.

A. Nagraj (Amarkantak) argues in his 'human centric' philosophy '*Madhayatha Darshan Sahastitvavad*'⁶ that physical-material, plant/pranic, animal orders are in the system (like cyclical/avartansheel) but the human beings are unable to fulfill their relationships with each other. The relationships among the material, pranic/plants and animal orders are mutually fulfilling and mutually enriching and this process is cyclic in nature. Right understanding of Nature and human being will be necessary to fulfill the relationship with all these orders. He further argues that the whole of existence is in the form of co-existence, as units submerged in space. Each unit is in self-organization within itself and fulfils its relationship with all other units. Every unit is reflected onto every other unit. There is harmony in existence. It means that no one has to create the harmony; it is already available/exists. One only needs to understand existence and align oneself with it. By understanding these processes in nature human being can be fulfilling to remaining three orders. All the three orders

are fulfilling their relationship with human being. Subsequently Human being must organize their life style to fulfill these three orders.



Socio-political, economic and personal choices must be based on the laws of physics (natural laws) in order to be in harmony with Earth and the human life. This basic principle was clearly recognized by Karl-Henrik. He further argues in his article '*Educating A Nation: The Natural Step*' that "It also happens that nearly all of our natural resources have been created by cells. Over billions of years, a toxic stew of inorganic compounds has been transformed by cells into mineral deposits, forests, fish, soil, breathable air and water - the very foundation of our economy and of our healthy existence. With sunlight as the sole energy supply, those natural resources have been created in growing, self-sustaining cycles - the "waste" from one species providing nutrition for another. The only processes that we can rely on indefinitely are cyclical; all linear processes must eventually come to an end. For roughly the past hundred years, humans have been disrupting the cyclical processes of nature at an accelerating pace. All human societies are, in varying degrees, now processing natural resources in a *linear* direction."⁷

Sometimes the scientific predictions are uncertain due to the complexity of an issue. What can be said about the present state of the world? Human civilization is endangered by anthropogenic environmental degradation, and by destructive social and individual conflicts. Healthy ecosystems are the major supplier of vital resources to humans.⁸ Scarcity of resources from the environment -- be it clean air, water, food, energy, or land -- leads to violent conflicts within nations, and to war and terrorism between nations⁹. Rwanda, the Sudan, and the Middle East demonstrate how violent conflicts emerge indirectly from an ecological deficit. Already today, 150 major

nations of the world show an ecological deficit. Taken together, the ecological footprint of all nations in the year 2001 is some 20% bigger than the ecological capacity of the Earth¹⁰.

A collapse of civilization is possible through nuclear weapons, and through loss of vital environmental resources. The current human activities are worsening the situation. Security once depended on military strength of a nation. The advent of nuclear weapons has ended this option; now military might lead to mutual assured destruction, and therefore the resolution of conflicts by the rule of international law has become a necessity.

The use of fossil fuels has advanced technology-based civilization to unprecedented levels. However today, we begin to realize that the consequences of our energy choices may lead to climate change, and the demise of fossil fuel based civilization.

Long term systemic thinking and appropriate action at the global and local levels are urgently needed for achieving sustainability, and civility in the world community. Sustainability is the overarching issue; it rests on three pillars: ecological, societal, and personal integrity.

Billions of human beings on the Earth are unhappy due to their inability to satisfy their basic personal needs (physiological needs, safety and security needs, love and belonging needs, esteem needs) as defined by A. Maslow.¹¹ Maslow has been a very inspirational figure in personality theories. In the 1960's in particular, people were tired of the reductionistic, mechanistic messages of the behaviorists and physiological psychologists. They were looking for meaning and purpose in their lives, even a higher, more mystical meaning. Maslow was one of the pioneers in that movement to bring the human being back into psychology and the person back into personality! At approximately the same time, another movement was getting underway, one inspired by some of the very things that turned Maslow off: computers and information processing, as well as very rationalistic theories such as Piaget's cognitive development theory and Noam Chomsky's linguistics.

In fact, every man wants to live with perennial happiness and prosperity. Almost all human efforts and time are spent in order to ensure physical (material) facilities. The inherent presumption behind this effort is that physical facilities will ensure uninterrupted happiness. If we look into this presumption, what appears is that in case of lack of physical facilities one feels unhappy. But it is well known that having enough of physical facilities cannot ensure continuity of happiness. Thus it becomes essential to address to the need of happiness and physical facilities separately. Consequently, one must understand happiness, physical facilities and the inter-relation between these two needs.

Well known scientist Carl Sagan in his widely acclaimed television series "The Nuclear Winter" (1983), explored the unforeseen and devastating physical and chemical effects of even a small-scale nuclear war on the earth's biosphere and life

on earth. War and terrorism within and between nations is a critical global issue. An all-out nuclear war causing a nuclear winter would be a catastrophe for humankind; it would not only create social chaos, but also ruin the life-supporting ecosystem beyond repair⁴. It is now almost 40 years since the invention of nuclear weapons. We have not yet experienced a global thermonuclear war -- although on more than one occasion we have come tremulously close. I do not think our luck can hold forever. Men and machines are fallible, as recent events remind us. Fools and madmen do exist, and sometimes rise to power. Concentrating always on the near future, we have ignored the long-term consequences of our actions. We have placed our civilization and our species in jeopardy. Healthy ecosystems are the major supplier of vital resources to humans. Lester Brown says in '*Plan B 2.0: Rescuing a Planet Under Stress and a Civilization in Trouble.*' "Our global civilization today is on an economic path that is environmentally unsustainable, a path that is leading us toward economic decline and eventual collapse."¹²

"Environmental scientists have been saying for some time that the global economy is being slowly undermined by environmental trends of human origin, including shrinking forests, expanding deserts, falling water tables, eroding soils, collapsing fisheries, rising temperatures, melting ice, rising seas, and increasingly destructive storms,"⁶. The links between environmental change and acute conflict will help us to evaluate our theory of environmental change and its contribution to conflict. Scarcity of resources from the environment (clean air, water, food, energy, land etc.) leads to violent conflicts within nations, and to war and terrorism between nations.¹³ Neomalthusians have argued that global environmental change leads to scarcities of resources that could lead to societal collapse. Somalia, Rwanda, and Haiti serve as poster children for such arguments.¹⁴

We can imagine the seriousness of the problem, today, 150 major nations of the world show an ecological deficit. Taken together, the ecological footprint of all nations in the year 2001 is some 20% bigger than the ecological capacity of the Earth. "Moderate UN scenarios suggest that if current population and consumption trends continue, by the mid 2030s we will need the equivalent of two Earths to support us. And of course, we only have one".¹⁵

A poll survey report published in Washington Post '*Mass Extinction Underway, Majority of Biologists Say*' "A majority of the nation's biologists are convinced that a mass extinction of plants and animals is underway that poses a major threat to humans in the next century. The rapid disappearance of species was ranked as one of the planet's gravest environmental worries, surpassing pollution, global warming and the thinning of the ozone layer."¹⁶

A human monoculture without the support of other species is not viable. Anthropogenic, human caused mass extinction of species is a threat to human survival¹⁷. The Millennium Ecosystem Assessment project reports on the loss of species in the last 30 years of the 20th century.¹⁸

Humanism – historical overview

Before discussing the role of the Humanism and developing Human consciousness-values for solving the global problem facing human society, we have to overview the

historical and conceptual development of the human society and its discourse in these regards.

Humanism has its roots over 2,500 years ago, when philosopher and thinkers in Greece, China and India formulated the idea than humankind alone is responsible for its own good, welfare and development. In the 1480s, Giovanni Pico della Mirandola wrote a preface to the nine hundred-page theses that he submitted for public debate entitled 'An Oration on the Dignity of Man'. Founder of Renaissance humanism was Petrarch who was also known as the "father of humanism." The crisis of Renaissance humanism came with the trial of Galileo, which was centered on the choice between basing the authority of one's beliefs on one's observations, or upon religious teaching. The root of the conflict was the Biblical teaching that "The truth will set you free" After and during the European Renaissance and Enlightenment, these ideas were revived and developed by Descartes, Diderot, David Hume, Thomas Paine, Voltaire, Mary Wollstonecraft etc. The growth of realistic knowledge about science, geology, astronomy and evolution in the 18th and 19th centuries showed that there was no need for religious and orthodox explanation of the various phenomena and process of Nature. This opened the way to a coherent view of how natural processes led to the development of the human species. In the 19th century Jeremy Bentham, Marie and Pierre Curie, Charles Darwin, George Eliot, Sigmund Freud, Thomas Hardy, T H Huxley, Robert G Ingersoll, John Stuart Mill, P B Shelley etc. and 20th century A J Ayer, Richard Dawkins, E M Forster, Julian Huxley, Nehru, Claire Rayner, Gene Roddenberry, Bertrand Russell have campaigned for the rights of nonreligious people, and Developed organisations and ceremonies which provide for their values and beliefs. Modern Humanism has evolved further during the 20th century which is promoted and supported by thousands Humanistic national and international organisations.

Humanist Values and Beliefs

Humanist Manifesto I (1933), Humanist Manifesto II (1973) and Humanist Manifesto III (2003) laying out a Humanist worldview. The central theme of all three is the elaboration of a philosophy and value system, which does not necessarily include belief in any personal deity or "higher power," although the three differ considerably in their tone, form, and ambition. Each has been signed at its launch by various prominent academics and others who are in general agreement with its principles.

Humanists believe that morality is based on human nature, human society and human experience; it has not come from a god or any supernatural entity. Humanists believe that moral values stem from the human need for happiness and the fact that we must live co-operatively together. They believe that there is no evidence for life after death, and so humanists place a special value on this life and on making the best of it. They do not expect justice in another life, and so work for justice in this one. Humanists try to follow the 'Golden Rule' treat other people, as you would like them to treat you, avoid harming others. Humanists value all human beings, celebrating both our common humanity and shared values, and the diversity of human culture. Prejudices based on race, gender, nation or belief should not be allowed to separate or discriminate human. Humanists believe that humans alone are

responsible for sustaining and improving our quality of life. Humanism is based on reason, not faith their views of the universe do not depend on a belief in God or Gods. Humanists are agnostic because they think that we cannot know whether God exists or not. Because there is no evidence for the existence of God or for an after-life, humanists live their lives as atheists, and find other reasons for living good lives. Humanists do not have sacred texts, traditions, dogma, prophets, or any source of authority other than human experience. Humanists look for evidence before they believe things and like to think for themselves. Humanists believe that knowledge best advances through openness and cooperation, through experiment and observation, and through free enquiry and discussion. Humanists accept that science provides the best available explanations for the existence of the universe and life on earth. Humanists do not believe that the universe or earth was created by God.

All individuals should have a right to self-determination. Furthermore, they should have freedom of choice and freedom to develop their own values and lifestyle, as long as they do not deny the same rights to others. Society should restrict an individual's liberties only in accordance with social needs in a democratic process. Therefore, tolerance and respect of others becomes another of the basic moral principles. The right to self-determination, however, necessitates personal responsibility and moral growth through education and rational, critical inquiry. Humanism is the intellectual formulation of the recognition of universal morality in a global society with all its freedoms and obligations. Humanism is the moral philosophy concerned with the reality available to us through reason and scientific inquiry. It is an open-ended process that provides answers to human problems.

However, cultural and physical Anthropology categorizes 'Humans' in terms of race or ethnicity, and on the basis of differences in appearance. The term race or racial group usually refers to the categorisation of humans into populations or groups on the basis of various sets of heritable characteristics.¹⁹ old racial categories were based on externally visible traits, primarily skin color, features of the face, and the shape and size of the head and body, and the underlying skeleton.

The human racial categories are based on visible traits (especially skin color, cranial or facial features and hair texture), and self-identification. People often use physical characteristics such as these--along with area of geographic origin and shared culture--to group themselves and others into "races." But how valid is the concept of race from a biological standpoint? Do physical features reliably say anything informative about a person's genetic makeup beyond indicating that the individual has genes for blue eyes or curly hair? ^{19, 20} we can say that all human beings belong to a single 'Homo sapiens', and share a common descent.

Regardless of the medical implications of the genetics of race, the research findings are inherently exciting. For hundreds of years, people have wondered where various human groups came from and how those groups are related to one another. They have speculated about why human populations have different physical appearances and about whether the biological differences between groups are more than skin deep. New genetic data and new methods of analysis are finally allowing us to approach these questions. The result will be a much deeper understanding of both our biological nature and our human interconnectedness.²⁰

The patterns of human genetic variation, however, correspond poorly with visible morphological differences.²¹ Most current genetic and archaeological evidence supports a recent single origin of modern humans in East Africa.²² Current genetic studies have demonstrated that humans on the African continent are most genetically diverse.²³ However, various studies by Am. J. Hum. Genet (2005), Bamshad M, Wooding S, Salisbury BA, Stephens JC (2004), Tishkoff SA, Kidd KK (2004) have indicated that compared to many other animals, human gene sequences are remarkably homogeneous.^{24, 25, 26, 27} Ethnic groups are more often linked by linguistic, cultural, ancestral, and national or regional ties. Self-identification with an ethnic group is based on kinship and descent. Race and ethnicity can lead to variant treatment and impact social identity, giving rise to racism and the theory of identity politics. Hence the question of equality can be solved on the basis of constitutional provision in all democratic states.

However Observations and recommendations regarding race and genetics by the National Human Genome Center of Howard University²⁸ are “when the human species is viewed as a whole, underlying genetic variation and expressed physical traits exhibit gradients of differentiation, not discrete units. Therefore, modern extant humans do not fracture into races (subspecies) based on the modern phylogenetic criteria of molecular systematics. The biological “boundaries” between any human divisions (groups, populations, nationalities) are circumstantial and largely dependent on what traits are chosen for emphasis.”

Hence the question of equality and understanding the natural system can be solved on the basis of constitutional provisions, which are the part of the governance of the democratic states. The role of the global society must be considered.

Global Civil Society

Chief Editor of the International Journal of Sociology François Houtart says “the debate on the limits, possibilities and opportunities facing civil society today is an open one. The issue was discussed during the World Social Forum in January in Porto Alegre, Brazil, which brought together spokespeople and representatives of civil society around the world.”

The concept of civil society is very fashionable at the moment. It is so widely accepted as to allow all kinds of interpretations, while at the same time covering all kinds of ambivalences. When the World Bank talks of civil society it is referring to a completely different reality than the one expressed by the Thai Poor People's Forum or the Brazilian Movement of Landless Peasants using the same term. It is necessary to analyze this term away from the slogans. Civil society is the arena for social struggles and thus for defining collective challenges, but before reflecting on how to build it we should first take a close look at the different ways the concept is currently interpreted.

Global civil society represents the potential of transnational civil society to enhance democracy in global governance. Numerous works are devoted to the role of new ideas, norms, and discourse of transnational advocacy networks^{29,30,31}.

The development of transnational networks may help to create new identities and awareness of global society that would improve the current discriminatory codes and practices based on established political boundaries. Richard Price³² implies that research into transnational civil society tends to overemphasize the effect of particular campaigns that aspire to liberal and progressive moral change and to downplay the ‘bad’ or failed campaigns. In a similar vein, Chris Brown³³ suggests that the pitfall of the global civil society scholarship is to assume that transnational advocacy networks would provide a panacea for world ills and represent the universal values of the human race.

Then, what factors contribute to the achievement of global civil society, lest we fall for versions of cosmopolitan idealism? Those who turn to history as well as theory suggest that the birth of global civil society could occur only in the further development and maturation of civil society. John Keane³⁴ argues that ‘so-called domestic civil societies and the emerging global civil society are normally linked together in complex, cross-border patterns of looped and re-looped circuitry’. The normative divide between domestic and global civil societies is nationalism, a collective sense of unity based on the cultural tradition and the recognized existence of a nation in a particular region. However, according to Edward Shills³⁵, civil society is sustained by national collective self-consciousness because its normative basis is a collective willingness to accept the legitimacy of the law and of authority, which enhances plurality of interests and ideals. Thus, nationalism is also an important vehicle for global civil society. Doak’s work on liberal nationalism is especially relevant here. He argues that internationalism and nationalism are interconnected (rather than mutually exclusive) because both require the existence of the state at least in the realm of imagination. Internationalism, which he describes as liberal nationalism, ‘upholds the principle of cooperation between states (and between the state and international organizations), finding in them a means of evaluating social norms that do not violate human rights, even while protecting the special rights of citizens’³⁶. Thus, there is no global civil society without a shared sense of national community.

The relationship between nationalism and internationalism is similar to that between civil society and global civil society. As civil society embraces civil and grassroots activities and the sustained participation of people in communal affairs, global civil society also involves activities of autonomous individuals in the pursuit of pluralism. Like civil society that ‘must be understood in *relation* to the state’, if not in ‘*opposition* to it’ (Schwartz)³⁷ (emphasis in original), the concept of global civil society can exist beside a sense of belonging to a nation or a state. What is significant about global civil society is that it leads to rising above parochial interests and encourages the development of a cosmopolitan world citizenship beyond national boundaries. In other words, global civil society does not surrender its respect for every human existence to the supremacy of a particular state and nation. In this sphere, ‘the citizen is a proud creature, ready to stand up for basic values of the open society, ready to go to battle for them if need be’³⁸. Thus, it comprises a cosmopolitan dimension that indicates a shared vision of the world, which provides the rights and dignities of the individuals.

A. Nagraj propounded **Madhyastha Darshan**, which is basically a human centric philosophy. At its core is the **co-existentialism**. Nagraj ji has elucidated on the harmony and balance in the human conduct as well as in natural phenomenon. He has proposed some guidelines (Human conducts) for the humanity that is known as *Manviya Samvidhan* (human constitution). Keeping human being in the focus, based on human mental faculties he has presented a number of *sutras* that are of very high value for establishment of universal human order. These *sutras* enlighten the path to the solutions of present day problems. It shows to the humanity a way for satisfied, prosperous, fearless and co existential life.++

Sandeep Pandey says "Jeevan Vidya (*Madhyastha Darshan*) identifies two distinct and independent components in a human being – the material body and the consciousness ('jeevan' or 'chaitanya'). Spiritualism or Sciences do not recognize their independent existence. Unlike Spiritualism, which is God-centered and mystical in nature, and Science, which is matter-centered and uncertain in nature, Jeevan Vidya is human-centered and deterministic in nature. Since spiritualism and science have failed to universally satisfy the quest for knowledge for human beings in a manner which could result in a just human order, there was a need to look beyond these two major streams of thinking which have guided human beings so far on earth."**

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EDUCACIÓN PARA UNA CIUDADANÍA GLOBAL GLOBALES LERNEN

Resumen: El presente artículo hace una reflexión sobre la Educación para la Ciudadanía Global (EpDG) propuesta por la UNESCO para la década de 2015-2024. La EpCG se presenta como una excelente herramienta pedagógica transversal que nos permite preparar mejor a nuestros alumnos y alumnas para los retos del futuro. Una ciudadanía consciente de algunos de los principales problemas globales que nos afectan supone mejorar su conocimiento de otras culturas, estimulando el cambio de perspectiva y la propia reflexión crítica.

Palabras clave: Educación para la Ciudadanía Global, Educación para el Desarrollo Sostenible, UNESCO, justicia social, globalización, globales lernen.



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GLOBAL CITIZENSHIP EDUCATION GLOBALES LERNEN

Abstract: This article reflects on Education for Global Citizenship (EfGC) proposed by UNESCO for the decade of 2015-2024. The EfGC is presented as an excellent cross pedagogical tool that allows us to prepare better our students for the challenges of the future. A conscious citizenship of some of the major global problems that affected us means to improve their knowledge of other cultures, stimulating the change of perspective and an own critical reflection.

Keywords: Global Citizenship Education, Education for Sustainable Development, UNESCO, social justice, globalization, globales lernen.

Introducción

El pasado mes de diciembre concluyó la denominada “**Década de la Educación para el Desarrollo Sostenible**” (DEDS), proclamada por la ONU desde 2005 ante la grave situación de pobreza, inequidad y agotamiento de los recursos naturales de aquel entonces. Lamentablemente, 10 años después de la puesta en marcha de este ambicioso e interesante programa, la necesidad de integrar los principios, valores y prácticas del **Desarrollo Sostenible** en todos los aspectos de la educación se ha hecho todavía más acuciante si cabe que en 2004. Fomentar cambios de comportamiento para preservar en el futuro la **integridad del medio ambiente, la viabilidad de la economía y una mayor justicia social** se ha convertido en una urgencia social.

La llamada “**Educación para la Ciudadanía Global**” es una de las principales herramientas pedagógicas que contribuyen a la formación para un desarrollo sostenible. La Educación para la Ciudadanía Global (EpCG) es la respuesta educativa al fenómeno de la globalización, y está orientada a la adquisición de capacidades, habilidades y conocimientos que nos permitan vivir de una manera más sostenible, responsable y solidaria.



Foto: juego ¿De dónde vienen nuestras frutas?

La acumulación de conocimientos pasa a ser un objetivo secundario dentro de esta estrategia multidisciplinar que busca **desarrollar la empatía, así como estimular el cambio de perspectiva y la propia reflexión crítica**. Que el alumno se haga consciente de algunos de los principales problemas globales que nos afectan, mejorar su conocimiento de otras culturas y utilizar una metodología muy interactiva, son algunas de las piedras angulares de la EpCG.

El proceso que se sigue tiene las siguientes etapas*:

- 1) **RECONOCER:** informarse y concienciarse de las consecuencias sociales y medioambientales que a nivel global tienen nuestras actuaciones a nivel local. Orientarse ante temas complejos y ver los problemas desde otra perspectiva, como puede ser la de una cultura o religión distinta.
- 2) **VALORAR:** favorecer el pensamiento crítico. Muchos de los problemas actuales que nos afectan son demasiado complejos para dar soluciones simples. El alumno tiene que aprender a confrontarse con las incongruencias y con los cambios de una realidad actual muy dinámica.
- 3) **ACTUAR:** desarrollar la solidaridad con los más desfavorecidos, compromiso y participación para descubrir nuestras opciones de actuación y ponerlas en práctica.



Foto: “viaje al país del Chocolate”: Niños de 5 años en una guardería aprendiendo de dónde viene y cómo se fabrica el chocolate. En la foto le vemos pintando un dibujo de una plantación de cacao

GLOBALES LERNEN

Globales Lernen (“Aprender global”) es el término que se utiliza en Alemania al referirnos a la Educación para una Ciudadanía Global. Cada vez hay más instituciones y profesores que se interesan por el tema, hasta el punto de que algunas ciudades ya han puesto en marcha una denominada “**Aula Global**” con el objetivo de facilitar las mejores condiciones para la realización de seminarios y actividades.

Desde hace unos meses he asumido la responsabilidad de dirigir el trabajo pedagógico de las “*Weltläden*” en la ciudad alemana de Heidelberg. Las *Weltläden* o tiendas del Mundo, más conocidas en España como “tiendas de comercio justo”, nacieron en Alemania en los años 70 como una forma diferente de ayuda al desarrollo. Hoy en día, están presentes en prácticamente todas las ciudades alemanas. En sus inicios se denominaban “tiendas del tercer mundo”, pero actualmente ya no hablamos de un primer, ni un segundo, ni un tercer mundo, hablamos de un único mundo en el que **todo está interrelacionado** y en el que nuestras compras y **actuaciones a nivel local tienen consecuencias a nivel global**. Estas tiendas tienen un importante papel educativo, ya que además de la clásica venta, realizan actividades de formación y sensibilización.



Foto: los juegos son parte esencial del trabajo de Educación para la Ciudadanía Global. Pueden llegar a ser muy complejos. En la imagen un juego sobre alimentación y sostenibilidad, adecuado para Bachillerato

¿En qué consiste nuestro trabajo pedagógico?

Nuestro trabajo pedagógico en la Weltladen de Heidelberg tiene varias líneas de actuación:

- Organizar **Workshops**: desde los 5 y hasta los 18 años ofrecemos actividades adaptadas a la edad y sobre temas concretos relacionados con el comercio justo y la sostenibilidad. Algunos de los temas son: cacao/chocolate, teléfonos móviles, prendas de vestir, etc.
- **Cofres**: hemos desarrollado unos cofres temáticos que contienen todo el material necesario para que los profesores o monitores puedan organizar ellos mismos sus sesiones. Incluimos videos, música, fotos, juegos y cuadernos informativos. Los cofres los alquilamos durante una semana.
- **Actividades de Formación para “multiplicadores”**: cada cierto tiempo organizamos sesiones donde enseñamos a utilizar el material de los cofres, o presentamos juegos educativos que pueden ser especialmente interesantes para trabajar en la clase diferentes temáticas.

No quiero dejar de poner un ejemplo concreto de lo que sería el trabajo con juegos. En el juego “**Reparto del Mundo**” los alumnos tienen que dividirse en los 5 continentes, según la proporción de población que ellos estiman que vive en cada uno de ellos. Existen unas tablas que indican el número de alumnos que debe ocupar cada continente según el número total que sean. Una vez que experimentan que el 60% de la población mundial se concentra en Asia, deben repartir la riqueza total del mundo, en este caso en forma de onzas de chocolate o trozos de pan, y experimentar como la pequeñísima proporción de población que habita en América del Norte acumula la gran parte de los recursos materiales. Una interesante reflexión y discusión suele poner fin a este juego.



Foto: taller sobre Pakistán y la producción de balones de fútbol cosidos a mano. Al final de la sesión los alumnos aprenden a reciclar plástico y convertirlo en divertidas pelotas para jugar

Situación en España

En España existe un claro referente cuando hablamos de Educación para la Ciudadanía Global: **Oxfam Intermón**. Esta ONG ha puesto en marcha una excelente propuesta educativa denominada "["Conectando Mundos"](#)". Este programa combina la actividad en el aula y el trabajo en red entre **alumnado de 6 a 17 años** de diferentes realidades culturales, económicas y sociales y en la que participan centros de todo el mundo. Cada año se trabaja una temática concreta relacionada con EpCG, como los derechos laborales, el cambio climático, la pobreza, etc.

Otra fuente de material muy interesante nos la proporciona [Global Express](#): documentación muy útil para trabajar temas y acontecimientos de dimensión global.

Más experiencias y recursos educativos los encontramos en la web de Kaidara:

<http://www.kaidara.org/es/busca>

Y para los profesores interesados en espacios de encuentro y trabajo cooperativo:

www.ciudadaniaglobal.org



Foto: charla sobre la producción de balones de fútbol en Pakistán

Reflexión final

En nuestra acelerada realidad global, la Educación para la Ciudadanía es una excelente herramienta pedagógica transversal que nos permite preparar mejor a nuestros alumnos **para los retos del futuro**. Un alumno con **una visión global y empática, sin miedo a lo diferente ni a lo cambiante**, será capaz de adaptarse con **mayor eficacia y creatividad** a los venideros escenarios laborales. Gran parte de los trabajos que se realizarán dentro de unos años todavía no existen, nos dicen muchos expertos, y las mencionadas capacidades junto a un **a adecuado pensamiento crítico**, ofrecen las mejores garantías de éxito.

Fuentes consultadas:

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www.epiz-berlin.de/
www.globaleslernen-berlin.de

Fotos: el autor.



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Santiago**



Transversal Studies Section

A TRANSDISCIPLINARY DIDACTIC APPROACH ON WATER



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Un modelo de sostenibilidad ambiental y social como base para el bienestar humano presente y futuro



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Crise da água na região metropolitana de São Paulo, Brasil

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Água: dentro de cada um, à volta de todos

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CRÓNICAS: CUENCA HIDROGRÁFICA DEL RÍO YAQUE DEL NORTE

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A TRANSDISCIPLINARY DIDACTIC APPROACH ON WATER

ABSTRACT:

This article describes a transdisciplinary didactic project which took place in Romania concerning a different approach on learning and understanding the complex topic of "water". The target group was the high-school students (age 14-18) from the "Moise Nicoara" National College, from Arad. The project aimed to offer an example of good didactic practice for achieving a holistic integrative view on the knowledge about water. The transdisciplinary methodology was used in order to cross the artificial boundaries of multiple disciplines and to gain a deep understanding of the importance of water in the history of mankind.

Key-words: water, transdisciplinarity, high school, understanding, reflection.



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The frame of the project

The Romanian Ministry of Education established "a different kind of school week", which usually takes place in every April, before the spring holyday. Classes do not follow the ordinary timetable, the official curriculum of each discipline respectively, but a new, different programme – conceived by the teachers in accordance with their students' interests and needs.

The Center for Transdisciplinary Applications in Education (C.A.T.E.) from the "Moise Nicoara" National College in Arad has built up and designed some transdisciplinary projects related to this special week. One of theese projects– designed for high school level students – had as a topic "A transdisciplinary "reading" of the water" and was designed and coordinated by me.²

We do hope that this approach will offer some good practice examples to the all other teachers or schools/colleges interested in the implementation of transdiciplinary teaching and learning in the high school didactic practice.

The project targets focused both on experiencing a transdisciplinary teaching-learning methodology and on setting up a holistic integrative view of the knowledge of water, developing a positive, desirable attitude which should contribute to the education for the quality of human and planetary life. The project contents were conceived and structured in order to get a synthesizing view on many dimensions and significations of water, able to transcend the borders of the known disciplines; the main outcome was to help teachers from different disciplines to teach together, as a team. The interactive workshops alternated explanations, power-point presentations, debates, topic-oriented visits, artistic creations and performances.

The thematic units (contents)

The contents of the project were structured in three topic-units as follows:

1. The Philosophy of water (sacred dimension)

- Water in cosmogonical "scenarios"
- Water in folklore rituals, in religious rituals
- Symbols of the water: living water/dead water; holy water, healing water
- Christening water and Flood water
- Water wisdom: syntagms, proverbs, sayings
- Water messages: crystallization experiments (Emotto)

2. Water life (profane dimension)

- Water as chemical substance; properties
- Planet water: roles, functions, dangers, threats
- Water crossing the human civilization evolution
- Water and the human body; intra-uterine water

3. Aquatic imaginary aspects (artistic dimension)

- Water images in literature, music, painting, dance etc

The three modules pointed out many and unexpected properties and meanings of water and generated a great deal of discussions and debates: teachers and students as well were challenged to answer many questions and problem-situations that came out from the new information issued during the presentations. The answers to the final questionnaire form, which was conceived as a feed-back, fully confirmed this aspect. Here are some problems students confessed they will keep thinking about: *the role of the water in the act of creation, the religious meanings of the water, the water in the human body, the subjective images of the water in artistic representation, the vital link between human being and the water, the spiritual force of the water, the significance of the Flood, the water magic power, water gives life but also kills, why does water have so many powers?, why does water react to feelings ?, is there water on other planets ?, how was water created?, why is man wasting so much water instead of appreciating it ?, Does water have feelings?, and so on.* Moreover, a student has sincerely admitted: *every time I will use tap water, from now on, I shall think twice in order not to waste the water that came in my house with such difficulty, thanks to so many centuries of civilization.*

This interrogative-reflexive part – started in students mind – seems to be the major gain of the project. Thus, there was a privilege for all participants (teachers and students) to get and give information, to share their own opinions, beliefs, to confront ideas, due to this different school week.

Description of the activities

Water was “read” by their mind, heart, sensorial attitude, into a valuable process of transdisciplinary knowledge.³ The visit to *The Water Tower*⁴ of the town and its museum facilitated the real knowledge of the objects and instruments that were used during the centuries by the rural and urban civilization concerning the use

of water; the creative workshops facilitated unexpected “meetings” between poetry, music and painting in the artistic imaginary frame of water; the presentations revealed the magic powers of the water as they are known in folklore, mythology and also the astonishing Bible significations of the water and its use in religious rituals; the scientific outlook on water brought forward for discussion its physical-chemical properties, its role in the human metabolism and in all living beings. Emotto’s experiments presentation was a great challenge too. Students could also express their artistic vision on water – by words, colors and sounds –: they selected the proper music for a given poetry text they were reading, they painted their own “view” on water, starting from a blue drop of paint, and transformed it in their own soul’s colors; they wrote incredible essays-answers to the final question of L. Blaga’s poetry “Song of the origin” (*What shall I be then?, Shall I be a cloud? Shall I be sorrow?*); They have imagined an ocean storm as in Turner’s paintings – using the fingers and palms only, to produce the sound of the rain drops and then the sound of the thunders; a valuable symphony was created and performed using “water glasses” (different glasses filled with different measures of water sound different). The series of unexpected experiences concerning the knowledge of water could go on indefinitely.

Conclusions

I intend to sum up the presentation of this project aiming at the water “reading” by quoting two participating students’ opinions as a conclusion.

“Our meetings during the program “A different school week” from project called “A trans-disciplinary understanding of water” started with a question. We had to ask a question about water; the answers came later, participating in the project. I was taken by surprise. Why a question about water? I thought that what I already knew about water was enough, simple and clear: well-defined chemical composition, colorless, tasteless, without smell, indispensable to life.

I think the students raised over 30 different questions about water. And the answers came from chemistry, traditional customs, biology, history religion, literature, music and art. It has been an interesting journey, one that opened my mind and taught me to dig down deeper into a subject, before I draw any conclusions.

We studied the dissolution of a substance in water by acting in a theater play. I was amazed finding out that the structure of crystallized water can change depending on our feelings. I understood that water is essential for life, but not from the usual classes. We expressed ourselves by painting and we discovered the symbols of water in old Romanian sayings, folk rituals, by listening to the holy teachings of religion or by admiring William Turner’s paintings.

Do you have any idea what can result from a drop of water and a little bit of color? Snap your fingers, imitating raindrops, read a poem and listen to music. You will feel "different" for sure!" (**Paul Crisan, 10th grade**)

"The different school week... I was waiting impatiently to see how it would take place and to my surprise, I was truly pleased by the activity I had chosen. "The transdisciplinary view upon water" project, or more simply put by us, students, "water", was a perfect example for us to see Transdisciplinary in action. We learned about the purpose of water as a fundamental element of this world, and not only that: we studied the importance of water from a philosophical and artistic point of view, as well as a religious and a scientific one. We also familiarized ourselves with its utility in the history of human civilization.

What grew on me the most were the debates we had in each session, sessions in which the teachers began a certain topic of interest and from that point on, everything derived to new perspectives, openings, thus leading up to even newer questions. The thought which stood by me constantly was the one to search deeper, to dig more thoroughly in the hope and with the purpose of knowing more. And it was these debates, in which took part both students and teachers, that had a major influence upon my understanding and fulfillment of my everyday life." (**Stefania Dumulesc, 10th grade**)

The photos below are a semnificative example of some of the activities which took place during the project. They also reveal the general atmosphere of a total different teaching-learning process.

PHOTO 1. What does water mean anyway?



PHOTO 2. Inside of the huge water tank of the town



PHOTO 3. Visiting The Museum of The Water Tower of Arad



PHOTO 4.The special music of the water

PHOTO 5. A drop of the soul color

PHOTO 6. An old Romanian folklore ritual for a magical calling of the water


Everybody knows that the present educational system- all over the world- is mostly built on disciplinary teaching-learning basis: disciplinary curriculum and assessment, disciplinary specialization of the teachers, disciplinary diplomas etc.

The topic of this project offers the opportunity to look for some proper answers to the following question: could the transdisciplinary methodology be applied within the frame of a disciplinary system of education? We are still looking for this answer. But something certain came out from this experiment: the transdisciplinary didactic approach on *water* is a better way for *understanding* the importance of the water for every individual. It offers a holistic perspective on it and at the same time the chance not only to achieve information about water but to *understand and feel* what water really mean. It is the first step for reaching a responsible individual and social attitude concerning the vital water for us all.

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NOTES:

- 1 "Moise Nicoară" National College, Arad, Romania
 - 2 Mureşan, M., (2012) A Transidsciplinary “Reading” of the Water, in “T” Journal, no.2, edited by The Trasdisciplinary Center of Educational Applications from “Moise Nicoara” National College, Arad, <http://www.moisenicoara.ro/t-journal-no-2/>
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 - 4 Follow the link: <https://aradheritage.wordpress.com/heritage/the-water-tower/>
- This article was published on 22nd March 2015, for the World Water Day, in Global Education Magazine.

Un modelo de sostenibilidad ambiental y social como base para el bienestar humano presente y futuro.

Resumen: El propósito del presente artículo, es el de proponer la elaboración de un modelo didáctico de sociedad sostenible, sustancialmente diferente al paradigma actual caracterizado tanto por el crecimiento exponencial de los indicadores económicos y poblacionales que conducen a la destrucción del medio ambiente, como por la manipulación ideológica por parte de sectores políticos y religiosos que propician el dominio de unas personas sobre otras y la confrontación entre los seres humanos. Este prototipo de ciudadela futurista, funcionaría como marco de referencia para la transformación de las sociedades humanas del presente y la construcción del mundo del mañana, con la finalidad de garantizar el bienestar particular y colectivo, el cual es a fin de cuentas el propósito de la existencia de los seres humanos.

Palabras clave: bienestar, sostenibilidad, mundo del futuro, destrucción del medio ambiente, manipulación ideológica, violencia.

An Environmental and Social Sustainability Model as the Basis for the Present and Future Human Welfare.

Abstract: The purpose of this article is to propose the development of a didactic model of sustainable society, substantially different from the current paradigm characterized both by the exponential growth of economic and population indicators that lead to the destruction of the environment, and the ideological manipulation by political and religious sectors favoring the dominance of some people over others and confrontation between humans. This prototype futuristic citadel, Would function as a framework for the transformation of human societies of the present and building the world of tomorrow, in order to ensure the individual and collective welfare, which is, after all, the purpose of existence of human beings.

Keywords: welfare, sustainability, future world, environmental destruction, ideological manipulation, violence.



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Desde el vientre materno, hasta la muerte

El bienestar puede ser considerado como “el estado de ánimo agradable producido por la abundancia de bienes y servicios accesibles y de calidad necesarios para una vida confortable; la salud física y mental; y un clima social propicio para la tranquilidad de espíritu”. (VALDIVIESO, 2012). Si observamos las curiosas fotos en las que un feto succiona su dedo pulgar mientras se encuentra en la comodidad de la placenta dentro del saco amniótico, no podemos menos que deducir que ese minúsculo ser humano ya comenzó a buscar ese agradable estado de ánimo que hemos definido como bienestar, anticipando el placer que le proporcionará tomar la leche del seno materno. “Recién nacidos, lloramos para que nos alimenten, nos abriguen o nos sanen; en la infancia, jugamos y nos reunimos con nuestros amigos para liberar endorfinas; y ya adolescentes y adultos, practicamos deportes, leemos, elegimos comidas y bebidas que satisfagan nuestros gustos, viajamos, buscamos comodidades, escuchamos música, nos enamoramos y ayudamos al prójimo; y todo esto ¿para qué? Simple y llanamente para sentirnos bien; básicamente venimos a este mundo para buscar bienestar”. (VALDIVIESO, 2014) “Los actos conscientes y deliberados que realizamos ¿son el efecto de qué? De un deseo. Las únicas personas a quienes no es posible aplicar esto, están encerradas en los manicomios. Las cosas que nos hacen obrar no son muchas. Hora tras hora, día y noche, estamos dominados por un número sorprendentemente pequeño de deseos.” (CARNEGIE, 1997).

Las condiciones y las trabas para alcanzar el bienestar

Una buena salud mental es el requisito básico para experimentar el bienestar. Ella se va construyendo incluso antes del nacimiento, en la medida en que la madre experimenta emociones positivas que son transmitidas a ese ser que está por venir al mundo. Para el recién nacido y el niño pequeño, es importante un ambiente familiar en el que abunden las palabras afectuosas, las caricias, y la disciplina controlada no maltratadora. Más adelante, lo ideal es un entorno en el que padres y docentes con su buen ejemplo y sus consejos, enseñen al joven a hacer frente a las diferentes situaciones problemáticas; a recrearse sanamente, y a relacionarse con sus amigos, su pareja, sus compañeros de estudio y de trabajo, así como con los extraños. Afortunadamente, aquellas personas cuyo ámbito educativo no ha sido el más indicado para lograr un estado mental satisfactorio, siempre podrán conseguir ayuda con profesionales especializados.

A la par de una deseable estabilidad psicológica, debe ir la salud física, que viene de la mano de una buena alimentación, la higiene diaria, los hábitos de sueño saludables y el ejercicio físico.

En un mundo con tanta profusión de recursos naturales y estando los seres humanos dotados de una inteligencia tan extraordinaria, no constituye ninguna dificultad el lograr la producción de los bienes y servicios abundantes, accesibles y de buena calidad, que logren satisfacer nuestras necesidades.

Cuando llegamos al aspecto de la necesaria paz social contenida en nuestra definición de bienestar, es cuando empiezan a surgir los problemas más serios.

Desde los comienzos de la historia, los seres humanos hemos llevado a cuestas una carga muy pesada, originada en nuestro pasado animal. La lucha por la supervivencia y la organización jerárquica de las antiguas manadas, se transformó en el egoísmo que hoy en día nos lleva a querer poseer más bienes que los demás, llamado afán de lucro, y en la avidez de tener dominio sobre otros, que denominamos el ansia de poder.

Aunque hoy en día nuestra portentosa inteligencia nos ha llevado a avances tecnológicos apenas imaginados una generación atrás, el afán de lucro y el ansia de poder continúan dominando a un buen número de talentosos, y connotados congéneres que llevan las riendas de la economía y la política mundial, quienes procuran mantenerse al mando de los destinos de la humanidad, aunque para lograrlo terminen agotando los recursos naturales del planeta tierra, e implantando regímenes políticos, tanto de derecha como de izquierda, que manipulan o coaccionan a los ciudadanos, mediante el simple uso de la fuerza bruta, o más sutilmente, mediante sistemas educativos tendenciosos.

Pero no solo el egoísmo y la avidez de poder ancestrales nos han marcado hasta nuestros días. La incomprendión de muchos fenómenos naturales asombrosos, como el cambio de estaciones, el sol, el fuego, los eclipses, las auroras boreales y la “aparición” nocturna de la luna, las estrellas, los asteroides y los cometas, llevó a nuestros antepasados a elaborar diversas explicaciones sobrenaturales que desembocaron en las religiones, las cuales no son más que concepciones del mundo sin basamento científico, en la que cada tendencia crea su propio dios o dioses y confecciona su propia teoría del origen del hombre, de las obligaciones de éste en la tierra, y de cómo hacer para ganarse un lugar en el mundo divino. Profundicemos un poco más en estos elementos, y en la forma en que ellos pueden afectar negativamente el bienestar humano.

El afán de lucro

La codicia ha llevado a la elaboración de renombradas teorías mercantilistas, que tienen como denominador común el denominado “crecimiento económico sostenido”, el cual consiste en el aumento indefinido del producto interno bruto de una nación, representado por los bienes, los servicios, la energía y otros indicadores económicos, así como del número de consumidores. Ahora bien, los sustentadores de esa tesis, ¿se han detenido alguna vez a ponderar que nuestro planeta tiene recursos finitos y una superficie irremediablemente limitada? “Si el actual incremento de la población mundial, la industrialización, la contaminación, la producción de alimentos y la explotación de los recursos naturales se mantiene sin variación, alcanzará los límites absolutos de crecimiento en la Tierra durante los próximos cien años”. (MEADOWS, 1972) “A través de nuestras deliberaciones y el testimonio de las personas en las audiencias públicas que sostuvimos en cinco continentes, todos los comisionados llegaron a concentrarse en un tema central: muchas de las presentes tendencias de desarrollo dejan un número creciente de personas pobres y vulnerables, mientras que al mismo tiempo degradan el medio ambiente. ¿Cómo puede este desarrollo servir al mundo del próximo siglo con el doble de personas dependiendo del mismo ambiente?”. (ONU, 1987).

Encontramos así, que la posibilidad de que el crecimiento económico descontrolado ocasione una catástrofe ecológica y humana en el transcurso de un siglo no es un delirio de ambientalistas radicales de mentes afiebradas, sino una probabilidad que ha movido a la preocupación de investigadores del Instituto Tecnológico de Massachusetts (ej. la fallecida Dra. Donella Meadows) y de la Comisión Mundial sobre el Medio Ambiente y Desarrollo de la Organización de las Naciones Unidas.

Pero el afán de lucro no solo representa un problema en lo que al incremento exponencial de los indicadores económicos se refiere. El sistema que promueve la tesis del crecimiento económico sostenido, denominado sistema de mercado capitalista, requiere, para su expansión, que haya cada vez más consumidores y que esos consumidores compren cada vez más. Para lograr esto lanzan una continua y agresiva campaña publicitaria a través de los medios de comunicación, las 24 horas del día, los 365 días del año, en la que se trata de convencer a los individuos que para ser “alguien importante” en la vida, para ser mejores amigos, novios, esposos o padres, deben adquirir u obsequiar determinados productos. Esta insistente maniobra “educativa” crea en las mentes vulnerables, especialmente las de los individuos más jóvenes, una convicción de que su vida debe girar en torno a la obtención de los productos anunciados, y genera frustración o propicia conductas delictivas en aquellas personas cuyo ingreso económico ordinario no alcanza para comprarlos.

El ansia de poder

La tendencia heredada de nuestros ascendientes por parte de algunos individuos, de querer dirigir al resto de sus congéneres, se transformó en la política, la cual en su peor faceta ha tomado la forma de dictadura, y en su versión moderada se ha convertido en reinado, sultanato y democracia representativa. La dictadura o totalitarismo de cualquier tipo es objeto de un amplio rechazo por su carácter impositivo violento. La monarquía, o el sultanato, siguen constituyendo formas arcaicas de gobernar, en las cuales un individuo se arroga el derecho de regir indefinidamente el destino de sus súbditos, transmitiendo ese poder a sus descendientes. La democracia representativa es el sistema más aceptado a nivel mundial, pero muchos de sus gobernantes utilizan la manipulación para alcanzar las posiciones de mando, a veces llegan a estas para obtener prebendas económicas, y se blindan con leyes que limitan la participación del resto de los ciudadanos en la toma de decisiones importantes.

La religión

Es impresionante como a estas alturas del Siglo XXI, la gran mayoría de los pobladores del planeta tierra ríjan sus vidas por los mandatos de unos seres sobrenaturales de cuya existencia no existe prueba científica alguna, y cuyas instrucciones están contenidas en escrituras materializadas por seres humanos que afirmaron haber sido elegidos para ello por las propias divinidades. Es necesario reconocer que buen número de las enseñanzas contenidas en los textos sagrados ciertamente se han constituido en piezas fundamentales para la elaboración de códigos de conducta que han sido muy beneficiosos para la humanidad, pero hay dos elementos contenidos en ellas que han contribuido en buena medida al estancamiento del desarrollo evolutivo del ser humano, y por ende a generar problemas. El primero, consiste en la afirmación a ultranza de la presencia de seres

prodigiosos que habitan fuera del plano material. Una persona que sostiene esto como una verdad absoluta, demuestra una credulidad que la puede hacer fácil víctima de cualquier hábil manipulador, quien puede aprovechar su condición privilegiada de apóstol de la doctrina divina, para obtener de forma egoísta, beneficios económicos u otras prerrogativas. Además, el creyente fervoroso tiende a pedir en exceso soluciones al ser celestial, minimizando su voluntad de enfrentar con decisión los retos que plantea la existencia. El otro elemento generador de grandes dificultades, lo constituye la interpretación inamovible de los textos sagrados. En algunos de ellos se encuentran disposiciones que alientan la discriminación por estratos sociales, por sexo y por diferencia de culto. El desprecio hacia a los desposeídos que no pertenecen a las castas dominantes; el maltrato a las mujeres que llega hasta la conciliación de sus libertades básicas, a la subordinación al esposo, el ultraje físico y hasta la mutilación; y el enfrentamiento abierto, violento y absurdo entre grupos humanos por el simple hecho de profesar creencias diferentes, y que ha causado y sigue causando tantas agresiones y asesinatos todos los años, no son ajenos a esos escritos y ocasionan mucha infelicidad en todo el mundo.

El crecimiento poblacional descontrolado

“Según la Revisión de 2012 de las estimaciones y proyecciones oficiales de población de las Naciones Unidas, la población mundial de 7,2 mil millones a mediados de 2013 se prevé que aumente en casi mil millones de personas dentro de los próximos doce años, llegando a 8.1 mil millones en 2025, y un aumento adicional a 9,6 mil millones en 2050 y 10.9 mil millones en 2100” (ONU, 2013)

De acuerdo a las investigaciones mencionadas anteriormente en este artículo, antes del año 2070 la tierra alcanzará los límites absolutos de crecimiento. El asunto del incremento desmedido de la población humana se relaciona directamente con las religiones, porque la generalidad de ellas propicia la natalidad como parte de la ley natural divina, limita en gran medida los métodos anticonceptivos, y proscribe la suspensión del embarazo y la esterilización femenina o masculina.

Un modelo para la sostenibilidad ambiental y social

Un ambiente en el que la mayoría de los seres humanos es víctima de la manipulación mal intencionada de los factores de poder económico, político y religioso; en el que los actos violentos absurdos motivados por la diferencia de creencias causan tanto sufrimiento y tantas muertes; y que a futuro se verá saturado de personas compitiendo por la supervivencia en un escenario de recursos naturales agotados y destruidos, no es el más propicio para el logro del bienestar individual y colectivo de los seres humanos del presente ni del futuro. Se requiere entonces de un cambio sustancial en nuestra manera de organizar las sociedades humanas, tanto en el aspecto material, como en el campo educativo.

Aunque nuestra meta final es la transformación del planeta tierra en un lugar en el que todos los seres humanos del presente y del futuro disfruten de niveles aceptables de bienestar, sabemos que lo correcto es ir paso a paso. Por eso planteamos como primera acción a realizar, la cual constituye el eje central de nuestra propuesta, el diseño y materialización en maquetas, animaciones, series y películas, de un modelo de ciudadela,

ambiental y socialmente sostenible, en el que se pueda observar la adecuada utilización de los recursos naturales, y formas saludables de interrelación humana. Este prototipo de conglomerado humano cumpliría la función pedagógica de ser un modelo de referencia, a partir del cual podrían comenzar a implementarse en nuestras colectividades modernas, los cambios fundamentales que se requieren para garantizar el bienestar de la humanidad a perpetuidad.

A grandes rasgos, entre las características básicas que una sociedad como la sugerida incluye, se encuentran las siguientes de acuerdo al ámbito de que se trate:

Economía

La generación de abundantes bienes y servicios accesibles y de calidad mencionados en la definición de bienestar que abre este escrito, son el resultado de un cuidadoso inventario mundial de recursos acuáticos y terrestres, de manera que pueda determinarse el número de habitantes que es capaz de soportar el planeta tierra perennemente.

Los recursos inventariados son repartidos equitativamente entre la población mundial, así como el conocimiento para su procesamiento de manera que cada nación o región específica pueda generar de manera autosuficiente sus propios bienes y servicios.

El concepto de crecimiento económico sostenido es sustituido por el de producción de acuerdo a las necesidades de la población.

La propiedad privada incluye el derecho de cada persona de poseer una vivienda junto con el terreno que ésta ocupa, así como todos los bienes muebles legítimamente adquiridos.

Las grandes empresas generadoras de bienes y servicios son de propiedad colectiva, no gubernamental, y su función es la de surtir a la población, y no la de generar lucro a propietario alguno. Entre ellas, la industria, la agricultura, el transporte masivo, las telecomunicaciones y la minería. El personal que labora en ellas recibe una remuneración acorde con su preparación y según la responsabilidad del cargo que ocupa.

Todo el resto del territorio fuera del que ocupa la vivienda particular, es de propiedad colectiva, y de libre acceso para los ciudadanos, con las consideraciones necesarias derivadas de condiciones de seguridad o buen funcionamiento. En él pueden establecerse, bajo la figura del comodato, empresas particulares prestadoras de servicios varios y organizaciones sociales.

Los artesanos, los artistas, los profesionales y los practicantes de oficios diversos, ejercen libremente su labor. Los escritores, los periodistas, los productores de video y los músicos, venden sus producciones vía Internet.

Los inventores e investigadores reciben estímulos económicos e institucionales por sus creaciones y descubrimientos. Los bienes elaborados por el aparato productivo colectivo, son expendidos en grandes y confortables centros comerciales, donde también tienen cabida los artesanos y los proveedores de servicios varios.

La banca es totalmente pública, y su función es la de distribuir y administrar los ingresos en materia monetaria, y no la de generar lucro.

El dinero es enteramente electrónico. Todas las transacciones quedan registradas con los datos del emisor y el receptor de los fondos, y son monitoreadas por las autoridades respectivas, todo ello con la finalidad de reducir al mínimo los delitos relacionados con la existencia del dinero en efectivo, y el anonimato.

Gobierno ciudadano

No obstante la existencia de autoridades regionales y nacionales electas democráticamente para la representación popular en el manejo de los asuntos oficiales, los ciudadanos tienen la última palabra en materia de revocatoria de cargos públicos, así como en la derogación de decisiones administrativas y judiciales, y en el funcionamiento de las empresas colectivas. Este derecho es ejercido mediante un sistema de opinión en línea.

Ambiente

Las fuentes de energía y materiales utilizados para la generación de bienes y servicios son todos sostenibles. Por ello, se descarta la utilización del petróleo y sus derivados, así como de la energía nuclear. En favor de la mejor utilización de los recursos madereros y las tierras agrícolas, el uso del papel se ve reducido a su mínima expresión. Los libros, diarios, revistas y afines, son ofrecidos en formato digital, y los dispositivos para el manejo de textos, cifras y gráficos son electrónicos.

Salud asistencial

Los servicios de salud asistencial son completamente gratuitos, e incluyen la atención por parte de especialistas, los medicamentos y las prótesis. Las consultas de diagnóstico tienen un costo mínimo, para desestimular la visita a los sanatorios por motivos triviales.

Control poblacional y derecho a la muerte digna

Los métodos anticonceptivos, la suspensión voluntaria del embarazo y la eutanasia, son derechos inalienables del ser humano adulto, y se ejercen contando con el asesoramiento previo de personal especializado.

Justicia

Todos los servicios judiciales son enteramente gratuitos.

Telecomunicaciones

El espectro radioeléctrico es del dominio y uso público con el fin de evitar la saturación ambiental y hacer igualitaria su disponibilidad. En él tienen cabida las emisoras públicas comunitarias de radio y televisión, la telefonía celular, las comunicaciones de transporte y seguridad, y el Internet. También hacen uso de él los particulares para comunicarse con radiotransmisores personales. Todas las empresas privadas de radio y televisión, así como creadores de sitios web, tienen plena libertad de emitir en la banda ancha del Internet

público, sin más limitaciones que las establecidas por los propios usuarios mediante los dispositivos de control parental y otros filtros. En la medida de lo posible, los aparatos de telecomunicación son inalámbricos.

Identificación

Existe una tarjeta única de identidad, de formato electrónico, la cual contiene todos los datos personales de interés para las autoridades respectivas. Entre ellos: nombre y apellido, fecha de nacimiento, número de identidad, estado civil, títulos, certificados, licencias, pasaporte, sanciones administrativas y otros .Este documento único también se utiliza para realizar las transacciones económicas, y registrar el acceso a las oficinas y servicios públicos.

Educación

La educación en todos los niveles es totalmente gratuita, con excepción de los implementos de uso personal (uniformes, bolsos, dispositivos para registro de datos, etc.) que deben ser adquiridos por los estudiantes, de manera que se evite el derroche de recursos por descuido o mala práctica. En el sistema educativo se da prioridad a los siguientes aspectos:

- Salud física y mental.
- Relaciones interpersonales.
- Ciencia y tecnología.
- Sostenibilidad.
- Ciudadanía.
- Valores positivos. Se hace énfasis en la práctica del bien como principio rector y norte de la existencia, basándose esta enseñanza en los resultados satisfactorios, científicamente comprobables, que este ejercicio reporta a las personas. A la vez se cultiva el razonamiento objetivo, poniendo en duda cualquier afirmación relativa al pensamiento mágico. Además, se promueve la defensa de las libertades individuales.

Justificación del modelo propuesto

Siendo la premisa del presente trabajo la búsqueda del bienestar de las personas del presente y futuro, sostenemos que la mejor manera de lograr este propósito consiste en diseñar el tipo de asentamiento humano aquí sugerido, ambiental y socialmente sostenible, caracterizado por la abundancia de bienes y servicios; condiciones saludables de vida; y una educación que realmente contribuya al crecimiento personal y al desarrollo de la ciencia y la tecnología; así como por la minimización de los delitos y las confrontaciones. Este proyecto piloto cumplirá la función de servir de guía, y a partir de él podrían comenzar a implementarse cambios fundamentales en los conglomerados humanos de hoy, con la idea de que dichas transformaciones se extiendan en el tiempo y en el espacio.

Ciertamente estamos proponiendo cambiar al mundo, pero no lo hacemos por pretensión, sino porque sencillamente consideramos que no hay otra alternativa. Si no reducimos drásticamente el ritmo de crecimiento económico y poblacional, y no educamos mejor a

nuestros congéneres en el pensamiento racional que los lleve a lograr niveles aceptables de bienestar, los ciudadanos del presente seguiremos presenciando o sufriendo altísimos índices de enfermedades mentales, escasez de agua, hambrunas y violencia, y nuestros descendientes probablemente lleguen a padecer el agotamiento total de los recursos naturales del planeta y el desarrollo de sangrientos conflictos bélicos a un a escala nunca vista, y quizás de consecuencias fatales para la humanidad.

Con los pies en el suelo y las ilusiones en el infinito

Entendemos que cambiar una mentalidad que se ha enraizado en la cultura humana en el transcurso de los siglos, es una labor titánica. A pesar de los informes presentados por destacadas organizaciones en cuanto al sombrío panorama mundial en un futuro no muy lejano dadas las actuales tendencias de utilización de recursos y crecimiento poblacional, connotadas figuras públicas de los centros de poder mundial aun defienden con fervor el concepto del “crecimiento económico sostenido” y representantes destacados del mundo religioso continúan condenando enérgicamente los métodos anticonceptivos y la suspensión voluntaria del embarazo, además de que algunos de ellos empeoran la situación promoviendo también la imposición violenta de su doctrina.

Solo nos queda mantener la esperanza de que millones de voces realizando propuestas para el logro de un mundo mejor en el hoy y en el mañana logren hacerse sentir, y terminen convenciendo a las grandes mayorías y a sus líderes, de la necesidad de pasar de la simple declaratoria de buenas intenciones, a la acción constructiva, de manera que el ser humano pueda finalmente dedicarse desde ahora y por toda la eternidad, a satisfacer el anhelo con el que parece haber sido dotado genéticamente, el cual no es otro que la búsqueda del bienestar.

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Crise da água na região metropolitana de São Paulo, Brasil

Resumo: A região metropolitana de São Paulo, com cerca de 20 milhões de pessoas, está em uma grave situação de escassez de água. Este texto, como uma reflexão para o Dia mundial da Água, aborda a problemática política que levou a crise de abastecimento de água na cidade de São Paulo. Apesar de ser influenciado por aspectos ambientais, incluindo uma média de chuvas abaixo do esperado e degradação ambiental, as opções políticas e o modelo de desenvolvimento são os maiores responsáveis pelo cenário atual. A solução para a crise hídrica inclui uma maior participação social, com maior posicionamento crítico dos cidadãos.

Palavras-chave: crise hídrica; gestão de recursos hídricos; democracia, justiça ambiental.



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Water crisis in the São Paulo metropolitan area, Brazil

Abstract: The metropolitan area of São Paulo – with about 20 million inhabitants – is currently undergoing a serious drought. As part of the general awareness of World Day of Water, this article looks at the policy issues that led to the water supply crisis in the city of São Paulo. Despite being influenced by environmental aspects, such as a recent lower than average rainfall and continuing environmental degradation, the policies and development models of regional government are also large contributing factors to the current situation. The solution to the water crisis involves increased social participation, including the understandably critical voices of those affected by drought.

Key-words: water crisis; water resources management; democracy, environmental justice.

Água e desenvolvimento

Segundo o relatório *Global Risks 2015* (World Economic Forum, 2015), a escassez de água potável é o maior risco a ser enfrentado pelo planeta nos próximos dez anos. Este relatório também indica que há a percepção de que estamos muito mais preparados para enfrentar riscos econômicos (como a falência dos principais mecanismos financeiros e a inflação), geopolíticos (ataques terroristas e armas de destruição em massa) e sociais (disseminação de doenças infecciosas e insegurança alimentar), do que para atacar com firmeza os riscos ambientais (Scharf, 2015).

Uma frase do Relatório do Desenvolvimento Humano (Pnud, 2006) sintetiza o desafio em torno do acesso à água, saúde, educação: “A água dá vida a tudo, incluindo o Desenvolvimento e liberdade humanos”. “A falta d’água afeta a dignidade humana, tem implicações de saúde pública, desespera, paralisa a atividade econômica” (Conta D’Água, 2015). Apesar da evidente importância da água, apenas em julho de 2010 a Assembleia Geral da Organização das Nações Unidas (ONU) aprovou uma resolução afirmando que o acesso à água e ao saneamento é “um direito humano essencial ao pleno desfrute da vida e de todos os direitos humanos” (Worship, 2010).

As estatísticas não são animadoras: o consumo de água nos últimos 50 anos triplicou, o que quer dizer que seriam necessários 3,5 planetas Terra para que toda a população mundial consumisse água como um europeu ou um americano. Estima-se que em 2030, cerca de 47% da população viverá em condições de estresse hídrico e que, atualmente, uma criança de um país rico consome de 30 a 50 vezes mais que uma criança de um país pobre (Leite *et al.*, 2014).

A crise global da água não reside na falta absoluta de fornecimento físico, mas se prende à pobreza, desigualdade sociopolítica e econômica, bem como a políticas de gestão da água deficientes, que aumentam a escassez (Pnud, 2006) [Para mais detalhes sobre a relação direitos humanos, desenvolvimento e acesso à água, veja Lamim-Guedes (2013)]. Neste sentido, tratamos da crise de abastecimento de água que afeta diversas cidades do sudeste brasileiro, nos Estados de São Paulo, Minas Gerais e Rio de Janeiro.

Crise da água: clima X gestão

O Brasil apresenta entre 12 e 16% da água doce disponível na Terra, sendo que cada habitante conta com mais de 43m³ por ano, dos quais apenas 0,7% é utilizado. Contudo, esta situação não é confortável: o volume é mal distribuído pelo território e a maior parte dele fica na região Norte, a menos populosa do país. Somado a isto, ainda temos os riscos do agravamento das mudanças climáticas (Leite *et al.*, 2014). Para José Antônio Marengo Orsini, pesquisador do Instituto Nacional de Pesquisas Espaciais (Inpe), “estamos observando na Região Metropolitana de São Paulo um aumento na frequência de chuvas intensas, deflagradoras de enchentes e deslizamentos de terra, distribuídas entre períodos secos que podem se estender

por meses”. O pesquisador complementa que “os modelos climáticos projetam que esses eventos extremos passarão a ser cada vez mais comuns em São Paulo e em outras cidades do mundo e podem até mesmo se intensificar, se forem mantidos os atuais ritmos de urbanização e de emissão de gases de efeito estufa” (Alisson, 2015).

Diversas regiões do Brasil passam por um extenso período de chuvas abaixo da média histórica. Apesar de ser uma situação relativamente comum no Nordeste do país região de clima semiárido, as áreas afetadas encontram-se no Centro-Sul, mais populosa e responsável por grande parte da produção industrial do país. Está incluída nesta região a metrópole de São Paulo, que tem cerca de 20 milhões de habitantes.

A previsão para os próximos meses não é animadora. “O fornecimento de água potável para a população, assim como de água para fins industriais, não pode ser garantido”, avisam os meteorologistas do Deutscher Wetterdienst (DWD) de Frankfurt - Alemanha (Crescenti, 2015).

A falta de água, além de colocar em risco o abastecimento, também carrega a possibilidade de “apagão” do sistema elétrico, já que as hidrelétricas respondem por 68,6% da energia brasileira. Ademais, o consumo tem crescido mais do que a capacidade de geração de energia elétrica, levando o sistema até perto do seu limite, porque produz quase a mesma quantidade de energia que consome e os reservatórios estão com o volume de água muito baixo (Benites, 2015).

Contudo, o ambientalista Dener Giovanini (2015) afirma que:

a falta de água não é uma “crise” porque ela não será passageira. Os fatores que levaram ao esvaziamento das represas não cessarão subitamente. Recuperar as Matas Ciliares que protegem os rios do assoreamento, reflorestar grandes áreas para manter a perenidade das nascentes, cessar o desmatamento da Mata Atlântica e da Amazônia, substituir uma prática agrícola predatória e, principalmente, adotar um novo modelo de desenvolvimento, não são medidas fáceis de serem adotadas e muito menos elas se encontram presentes na agenda dos atuais governantes.

“Colapso hídrico” talvez seja um termo mais adequado. A figura abaixo ilustra a redução do volume armazenado de água no sistema Cantareira. Como pode ser observado, a redução sistemática do volume das represas vem acontecendo a 4 anos. Este sistema de represas é a principal fonte de água para a região metropolitana de São Paulo, sendo responsável pelo abastecimento de aproximadamente 6,2 milhões de pessoas. A administração dos sistemas de represas que abastecem a grande São Paulo é responsabilidade do governo estadual, sendo a gestão feita através da empresa de capital misto SABESP (Companhia de Saneamento Básico do Estado de São Paulo).



Figura 1: Volume de água nos reservatórios do sistema Cantareira entre os anos de 2011 e 2014. A data de hoje refere-se a primeira semana de março de 2015. Fonte: perfil Rios e Ruas no Facebook.

O sistema Cantareira chegou a um volume de 11,1% no final de fevereiro de 2015 ou – uma percepção mais representativa da situação atual – 18% abaixo do nível operacional normal, já que a SABESP está retirando água do volume morto (volume de água localizado abaixo das comportas das represas), reserva de água nunca utilizado para atender à população no Estado de São Paulo [para uma visão geral da crise, acesse o [infográfico](#): AJ+ (2015a)].

Contudo, como afirma o relator da ONU sobre água e saneamento Leo Heller, "estiagem é baixo volume de chuva; escassez é acesso limitado à água". Ainda segundo Heller, "a estiagem não deve se converter em escassez no sistema de abastecimento. [Para isso] é necessário haver planejamento para pensar em medidas que evitem a falta de água" (Maranhão, 2015). A opinião de Heller é semelhante à da relatora que o antecedeu, a portuguesa Catarina de Albuquerque (Sampaio, 2014).

No entanto, apesar do cenário de crise, o Brasil é o quarto país que mais exporta “água virtual” no mundo, através de *commodities* como soja e carne. A água virtual é a quantidade de água gasta para produzir um bem, mas que não está incorporada ao produto final - sendo, portanto, uma medida indireta dos recursos hídricos consumidos por um bem.

Responsabilidades comuns, mas diferenciadas

O princípio 1º da *Conferência Quadro da Organização das Nações Unidas sobre Mudanças Climáticas* afirma que “as Partes devem proteger o sistema climático em benefício das gerações presentes e futuras da humanidade com base na equidade e em conformidade com suas **responsabilidades comuns mas diferenciadas** e respectivas capacidades” (Brasil, 1998). Apesar desta convenção não ser focada na questão da gestão hídrica, este princípio

pode ser aplicado à atual situação de crise, sobretudo pela opção do governo estadual – com uma adesão acrítica da mídia nativa – pelo foco das ações de redução de consumo sobre os consumidores residenciais, ignorando o fato de que apenas a menor parte do consumo de água do sistema Cantareira é voltado para consumo humano.

Neste sentido, o governo minimiza a pressão sobre grandes consumidores, como indústrias e centros comerciais (*shopping centers*), grandes consumidores que teriam papel mais importante na redução do consumo do que os cidadãos comuns, sobretudo aqueles de baixa renda.

Em conversa com alunos de um curso pré-vestibular social oferecido nas dependências da Universidade de São Paulo, um aluno comentou: “quer dizer que nós, pobres, que deveríamos economizar menos, somos quem mais economiza?”. E a conclusão é que “sim”. Esta faixa da população é a que mais sofre com o racionamento de água – apesar do governo estadual dizer que não há racionamento – e a que mais se esforça para a redução do consumo. Esta situação é diametralmente oposta ao princípio das “*responsabilidades comuns, mas diferenciadas*”.

Por sinal, o governo estadual resiste em divulgar a lista dos maiores consumidores de água na região metropolitana de São Paulo (Martín, 2015b), o que evidencia sua proteção a estes atores e reforça a situação de injustiça ambiental da crise hídrica. Isto é, populações pobres, periféricas, com alta porcentagens de negros e minorias, suportando uma imposição desproporcional dos riscos ambientais.

A SABESP firmou 42 contratos com grandes consumidores de água em 2014, 30 deles a partir de março, com a crise no abastecimento já em curso. Apenas estes contratos firmados em 2014 correspondem, proporcionalmente, ao consumo de 101 mil famílias. Estes contratos premiam o consumo, ou seja, quanto maior ele for, menor o preço pago por litro de água, sendo bem menor do que o valor pago por pequenos consumidores (incluindo o uso residencial). O volume de água comercializada através destes contratos aumentou 92 vezes nos últimos 10 anos (Moraes e Viana, 2015).

Como comentado pelo *El País Brasil*: “mimir os melhores clientes é uma estratégia comum no mundo empresarial, exceto pelo fato de que São Paulo atravessa a pior crise hídrica em 84 anos” (Martín, 2015a). Esta situação fica evidente quando o governo estadual não divulga a identidade dos maiores consumidores (como citado anteriormente), assim como pela multa que será aplicada aos consumidores que aumentarem consumo. A multa será de 40% a 100% para quem consumir mais água neste ano, comparativamente ao período entre fevereiro de 2013 e janeiro de 2014. Com isto, reafirma-se a opção de proteção dos grandes consumidores, em contrapartida a uma punição para o consumidor residencial.

Ao priorizar o uso de indústria e comércio, o governo estadual está desrespeitando o artigo primeiro da Lei Federal nº 9.433/97, que trata da *Política Nacional de Recursos Hídricos*, segundo o qual “a água é um bem de domínio público; a água é um recurso natural limitado, dotado de valor econômico; em situações de escassez, o uso prioritário dos recursos hídri-

cos é o consumo humano e a dessedentação de animais” (Brasil, 1997). Como afirmou a portuguesa Catarina de Albuquerque, Relatora das Nações Unidas para a questão da água e saneamento entre 2008 e 2014, “a prioridade tem de ser as pessoas. Quem usa a água para outros fins tem mais poder que os mais pobres, que têm de ter esse direito garantido” (Sampaio, 2014).

O cenário político em torno da crise de abastecimento de água demonstra um uso econômico e político dos recursos hídricos, contudo, sem o devido respeito ao *Princípio da Precaução* e à população, sobretudo a mais pobre e periférica. Isto fica claro quando percebe-se que a SABESP retirou muito mais água do sistema Cantareira antes das eleições de outubro de 2014 – na qual o governador Geraldo Alckmin buscava sua reeleição - do que no período anterior, mesmo com a redução no volume deste reservatório, com um pico de retirada de água do reservatório justamente no dia da eleição (primeiro turno, realizado em 5 de outubro de 2015) (Cardoso, 2015). Por sinal, o governador reeleito Geraldo Alckmin usou de neologismos e amenização da linguagem para maquiar a gravidade da situação: racionamento, para ele, seria “redução de pressão na rede de abastecimento” e volume morto foi chamado de “reversa técnica”.

Racionamento e Movimentos sociais

Após quase um ano do início da crise no abastecimento de água, somente em janeiro de 2015, o governador do Estado de São Paulo admitiu que o racionamento ocorre no Estado desde que a Agência Nacional de Águas (ANA, órgão federal que trata da gestão de recursos hídricos) determinou, em março de 2014, a diminuição na retirada de água do Sistema Cantareira (Santiago, 2015).

A redução de pressão na rede de abastecimento, inicialmente usada para reduzir as perdas nas tubulações (que podem chegar a 30% do volume de água tratada na grande São Paulo), passou a ser a principal ferramenta do governo estadual para economizar água em meio à crise. O governo estima que 200 mil pessoas sofrem com o desabastecimento de maneira drástica. Segundo pesquisas de opinião do Datafolha de maio de 2014, 35% dos paulistanos afirmaram ter tido o fornecimento de água interrompido no mês anterior. Em fevereiro de 2015, esta porcentagem aumentou para 71% (Lobel, Souza e Iory, 2015).

Com tal situação de acesso à água e seu uso político, há uma intensa mobilização social, com forte adesão em redes sociais e protestos em locais públicos, incluindo intervenções artísticas, como grafites (veja: Acayava e Machado, 2015). A elevação do nível do sistema Cantareira registrada desde o início de fevereiro de 2015 amenizou as críticas feitas pela grande mídia, assim como trouxe um tom de otimismo para muitos políticos, porém o aumento está muito longe de ser tranquilizador, sendo insuficiente para recompor o volume morto e recuperar a normalidade do reservatório (Gomes, 2015).

O cenário a médio prazo não é animador, pois o período mais chuvoso do ano está chegando ao fim, uma vez que, em meados de maio, a pluviosidade cai bastante, só voltando a

chover satisfatoriamente em outubro-novembro. Prefeitos da região metropolitana de São Paulo temem problemas gerados a partir do racionamento, como o aumento do número de doenças provocadas pela água impura e eventuais saques de água pela população desabastecida, aumento da violência e transtornos com o corte, que pode ser ocorrer por até cinco dias consecutivos (Agostine, 2015). Enquanto este cenário não se concretiza, já tivemos grandes protestos na cidade de São Paulo. No dia 26 de fevereiro de 2015, aconteceu o primeiro grande ato, com cerca de 15 mil pessoas (veja fotos em Mídia Ninja e Capriglione, 2015).

Mídia, informação e posicionamento crítico: necessitamos de uma educação global?

Um grande problema desta crise de abastecimento de água é a despolitização do problema. Parece que não causa espanto o fato de a crise ocorrer em uma cidade tropical com alto índice pluviométrico. Esta situação traz à tona a visão malthusiana do conflito entre crescimento humano e uso dos recursos naturais, com o agravamento devido à precificação da água (Milanez, 2015).

Posicionamento crítico talvez seja uma solução para este e outros problemas brasileiros, como comentado por Mauricio Moraes (2015):

Em 2014, nas eleições para o governo do Estado, a cegueira estava disseminada. Diferentemente do livro de José Saramago, onde uma mancha branca, um “mar de leite”, cegava um a um os habitantes de uma cidade fictícia, em São Paulo os cegos continuavam enxergando. Mas há tempos já se diz que o pior cego é aquele que não quer ver.

Por sinal, o que vemos é a existência de um grande contingente de “analfabetos midiáticos”:

Ele [o analfabeto midiático] ouve e assimila sem questionar, fala e repete o que ouviu, não participa dos acontecimentos políticos, aliás, abomina a política, mas usa as redes sociais com ganas e ânsias de quem veio para justiçar o mundo. Prega ideias preconcebidas e discriminatórias, e interpreta os fatos com a ingenuidade de quem não sabe quem o manipula. Nas passeatas e na internet, pede liberdade de expressão, mas censura e ataca quem defende bandeiras políticas. Ele não sabe que o custo de vida, o preço do feijão, do peixe, da farinha, do aluguel, do sapato e do remédio dependem das decisões políticas. E que elas – na era da informação instantânea de massa – são muito influenciadas pela manipulação midiática dos fatos (Vicenzi, 2013).

Está claro que estamos frente a um grande desafio ambiental: recuperar nascentes, matas ciliares, proteger áreas de recarga do lenço freático, mitigar as mudanças climáticas, assim como desenvolver meio de adaptação a estas mudanças. Contudo, a questão política em torno da crise de abastecimento de água é uma situação mais urgente e imediata que a problemática ambiental. “Os reservatórios até poderão encher, mas as razões que os levaram a secar continuam e eles novamente voltarão a ser o que são hoje: terra seca” (Giovanini, 2015). Como apresentado neste texto, temos uma situação de proteção aos grandes consumidores e uma penalização das populações mais vulneráveis. Além disto, o governo estadual esquia-se de suas

responsabilidades e de um tratamento sério da situação atual. Somada a esta situação, temos a necessidade da sociedade também chamar para si as responsabilidades, uma vez que muitas tecnologias sociais podem contribuir para a obtenção de fontes alternativas de água, como a coleta de água na chuva [veja o [vídeo AJ+](#) (2015b), veja também Silva *et al.* (2012)].

Assim, para se evitar situações como a da crise de abastecimento de água – que é muito mais uma questão política e de gestão de recursos hídricos, do que um problema ambiental –, devemos passar ao exercício da democracia, da participação política, da alfabetização científica (veja mais em Lamim-Guedes, 2014) e pela existência de uma educação libertadora, como preconizado por Paulo Freire. Neste sentido, dependemos também de ações educativas que favoreçam uma compreensão adequada da vida em sociedade, incluindo os direitos humanos, a igualdade e o desenvolvimento sustentável. Em São Paulo, como no Brasil e em boa parte do planeta: necessitamos do exercício de uma educação global.

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Água: dentro de cada um, à volta de todos

Resumo:

As distintas crises hídricas pelo mundo refletem uma consciência pouco desenvolvida acerca do que é essencial para a vida. Cidadãos pouco conscientes; descasos governamentais; agronegócios que utilizam fertilizantes que contaminam solos e lençóis freáticos; indústrias com despejos irregulares de esgoto, todos têm sua responsabilidade perante aqueles que são ou já foram prejudicados com a falta de água e perante o meio ambiente poluído. Diante do cenário chocante em alguns países africanos, no Brasil, na China e em outros locais, movimentos e estudos surgiram convidando a todos a repensarem o modo como à água é utilizada e acrescentando novos conhecimentos a respeito da influência desse elemento para a vida humana e para o planeta que vão além da questão da necessidade física.

Palavras-chaves: Água potável, poluição, governo, indústria, cidadão, projeto, responsabilidade, consciência.



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Thinking About The Water Inside and Around Everyone

Abstract

The different water crises around the world reflect an undeveloped awareness about what is essential for life. Citizens with little consciousness, government Negligence, agro-business using fertilizers that contaminate soil and groundwater, industries with irregular sewage dumps, all have their responsibility to those that are or have been affected by the lack of water and to the polluted environment. Given the shocking scene in some African countries, Brazil, China, and elsewhere, movements and studies are inviting everyone to rethink the way water is used and adding new knowledge about the influence of this element for human life and for the planet that go beyond the issue of physical need.

Key-words: Drinking water, pollution, government, industry, citizen, project, responsibility, conscience.

Pensar em um mundo sem água é como imaginar o mundo sem ar, sem o calor do sol ou sem a terra. Seria um planeta em que a forma de vida conhecida hoje não existiria. Que atores estão envolvidos com a utilização inadequada desse recurso? Em que se resume a importância da água? Apenas na necessidade física? Qual tem sido a postura da humanidade diante de tudo que lhe permite a existência e como ela tem expressado sua gratidão?

A desarmonia entre o comportamento do homem e o meio em que ele vive é clara. Muitas matas e animais não existem mais; muitos rios e mananciais estão poluídos; o ar está a cada dia mais impuro, e muitas pessoas morrem por não terem acesso à água tratada e nem ao saneamento.

Certamente, não há gratidão, não há respeito e não há amor.

Quem não for capaz de compreender a relação entre esses três conceitos e o mau uso da água precisa pensar que:

- apenas 20% da água residual do globo é atualmente tratada;
- 750 milhões de pessoas no mundo não têm acesso à água adequada ao consumo.

Diante de distintas crises hídricas e do alto nível de poluição de importantes rios e mananciais, é possível perceber o descaso, tanto com os modos de uso da água, seja pelo consumidor individual, seja pelas indústrias e outros. Tal postura confirma um modelo de vida em que o consumo desenfreado e o lucro estão, na maioria das vezes, acima da questão de sustentabilidade.

Muitos colaboram com o mau uso da água, ainda que inconscientemente, enquanto outros lutam pelo seu uso sustentável. Diferentes atores estão envolvidos nessa questão da utilização da água, elemento vital: governo, indústria, agricultura, cidadão; ou seja, todos seres humanos.

A questão do planejamento e comprometimento, por parte dos políticos, para que a população tenha acesso à água limpa, exige esforço, investimento e dedicação, uma vez que água tratada é imprescindível à sobrevivência e ao desenvolvimento humano. Infelizmente, não se têm observado essas ações. Um exemplo de descuido com a população é a seca que assola o nordeste brasileiro há anos, onde, no período de seca, a produção e a agricultura são afetadas e, consequentemente,

não há trabalho e nem alimento. As pessoas dessa região passam por muitas dificuldades, que as levam a deixar o local atual, buscando locais aonde possam sobreviver. Elas ficaram conhecidas como “retirantes” e assim são retratadas – como forma de denúncia social - na música, na literatura, no cinema e na arte brasileira em geral.

Importante lembrar que uma das saídas propostas pelo governo para o abastecimento de água no nordeste brasileiro foi a transposição do Rio São Francisco. O projeto foi iniciado em 2006 e, ainda hoje, não se resolveu o problema de seca no sertão.

O engenheiro agrônomo e estudioso de recursos hídricos, João Suassuna - da Fundação Joaquim Nabuco, no Recife (PE) - garante que o potencial de recursos hídricos do Nordeste tem capacidade para abastecer o território, e aponta que o problema está na gestão.

A questão da gestão também afeta o acesso à água limpa em diversos países do continente africano, onde cerca de 300 milhões de pessoas ainda não têm acesso à água limpa. Entretanto, em diferentes partes do território há reservatórios subterrâneos com água suficiente para abastecer a população.

No que se refere à indústria de modo geral, o índice de substâncias químico-tóxicas que elas descartam pelo esgoto é alarmante. Esse esgoto, além de contaminar a água da superfície, onde é despejado de maneira irregular, pode contaminar os solos e os lençóis freáticos, que são uma grande reserva de água para a humanidade.

Dentre essas substâncias químico-sintéticas estão as chamadas POPs – produtos orgânicos persistentes – conhecidas por serem resistentes à decomposição e terem o poder de se acumular em tecidos de organismos vivos, provocando perturbações hormonais. Os peixes podem ser usados como exemplo de organismo que acumula POPs e, como estão na cadeia alimentar que terminará no ser humano, este herda tudo o que estava acumulado no organismo do animal.

Outro impacto de poluentes na água são as chamadas Zonas Mortas, nas quais o oxigênio é consumido à medida que essas substâncias químicas se decompõem, diminuindo, portanto, o oxigênio da água, tornando-a imprópria para a vida nessas áreas. Em 2012, só na China, a descarga de matérias poluentes, dentre elas metais pesados, foi de 17 milhões de toneladas. Na agricultura chinesa, fertilizantes

nitrogenados são altamente utilizados mesmo sendo fatores de contaminação para os solos e lençóis freáticos.

Muitos cidadãos ainda usam água de forma indiscriminada, desperdiçando esse recurso, despejando lixos em locais impróprios e não reutilizando a água quando possível. Esses são apenas pequenos exemplos da pouca consciência que há em relação ao uso águas. Também há a questão da responsabilidade no momento de consumir produtos. Muitos produtos disponíveis no mercado não apresentam responsabilidade ecológica na sua produção. Quando utilizados, suas substâncias químicas, em contato com a água, continuam poluindo-a, além de fazer mal ao consumidor, até mesmo pelo seu contato físico com tais produtos. Adquirir esses produtos é participar da degradação do planeta, ainda que de maneira não consciente.

Em contrapartida, há pessoas que lutam para que haja conscientização para o uso da água de forma mais harmônica e respeitosa, o que só tem a elevar a qualidade de vida no planeta.

Um exemplo disso é a campanha Detox, do Greenpeace. Ativistas por todo mundo se uniram em uma campanha global para chamar a atenção sobre os componentes tóxicos utilizados pela indústria da moda, e da água que não é devidamente tratada ao retornar ao ambiente natural, poluindo e contaminando diversas fontes hídricas. Mais de meio milhão de pessoas desafiaram diversas marcas a tratarem seu esgoto antes de despejá-lo no meio ambiente, e a eliminarem componentes tóxicos de sua produção. O fato de a campanha ter trazido a questão para a mídia, deu oportunidade às marcas de repensarem a origem dos seus produtos dentro do mercado, assim como a toda a sociedade de aderir à campanha contra produtos prejudiciais ao meio ambiente e ao próprio homem.

A Ryan's Well Foundation é também uma sensível iniciativa. Em 1998, aos 6 anos, Ryan Hreljac, natural do Canadá, em uma aula na escola primária aprendeu sobre o difícil acesso à água limpa em países africanos. A questão o levou à iniciativa de juntar dinheiro com seus familiares e amigos para a construção de um poço. Buscou a WaterCan (ONG canadense), que se comprometeu a arrecadar o capital que faltava. Um ano depois (1999), foi construído o primeiro poço com a iniciativa de Ryan Hreljac, no Norte da Uganda, perto de uma escola. Ainda esse ano, Ryan criou a fundação Ryan's Well. Desde então, muitos projetos já foram realizados e muitos continuam em andamento.

Outro projeto envolvido na questão da água é o Emoto Peace Project, declarado durante um seminário nas Nações Unidas em 2005. O foco é a educação infantil sobre água. Massuro Emoto se comprometeu com a distribuição de 650 milhões de exemplares da versão infantil do seu livro “A Mensagem da água”, nos dez anos seguintes. Nesse projeto, a importância da água não está demonstrada pela necessidade do organismo físico, mas pela influência que os discursos do homem, em suas diversas manifestações, têm sobre ela.

Emoto trouxe um novo entendimento e uma nova consciência sobre a água, para a humanidade. Em seu experimento, congelou gotas de água e observou-as através de um microscópio. Primeiro estudou as águas de torneiras, rios, lagos e outros. Águas de diferentes fontes formavam distintas formas de cristais ou imagens distorcidas. Ao tocar música, mostrar palavras e imagens ou fazer orações para água, percebeu que a maneira como a água se cristalizava mudava de acordo com manifestações externas recebidas. Ele notou que a água capta estímulos externos, guardando em si uma mensagem. Manifestações positivas, como, por exemplo, ao mostrar as palavras “Gratidão” e “amor” para água, formaram um cristal perfeito. Mensagens negativas, como “seu tolo”, formaram um cristal distorcido.

Há certamente, muito trabalho a ser feito. O primeiro deles é reconhecer a importância do trabalho coletivo. Sem ele, alcançar metas globais é utópico. Não é possível algo ser preservado por poucos, quando o que está em questão é de uso de todos. Se, em um país, apenas 10% das empresas atuarem de maneira ecológica e as outras 90% não, a problemática da água persistirá. Essa lógica pode ser utilizada em relação a todo planeta. E isso vale para todos, como cidadãos, antes de serem pais de família, donos de empresas, políticos, acionistas, agricultores; enfim, para todos. Transcender a importância da água, compreendendo as diversas influências que ela tem sobre o homem e sobre o meio em que ele vive é, também, fundamental.

Pessoas como Ryan Hreljac e todos que contribuem para um mundo melhor são de extrema importância. A grande contribuição de Emoto para a humanidade é a possibilidade de ser despertada nova consciência em cada pessoa.

Percebe-se, pelo aqui apresentado, que a importância da água não consiste apenas em saciar a sede, ou para higiene pessoal ou para a produção das empresas. O corpo humano é constituído por aproximadamente 70% de água. Quando bebê, a

água chega a atingir 85% da massa corpórea. Sabendo-se que a água é capaz de absorver informações e expressá-las, imaginar a propagação dessas mensagens dentro do organismo traz uma nova maneira de pensar as atitudes do homem. Ao se considerar a água sob essa perspectiva, é possível concluir que a água tem um poder muito grande dentro do corpo humano e em todo planeta, que tem 71% de água em sua superfície.

Sendo assim, a água não é apenas uma substância que supre a necessidade física ou que mantém a produtividade global em andamento, ela se comunica diariamente com estímulos a sua volta, guardando em si o que há de positivo ou de negativo ao seu redor. A água está dentro de cada um e à volta de todos.

“Tudo o que acontecer à Terra, acontecerá aos filhos da Terra”

Cacique Seattle (1855)

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CRÓNICAS: CUENCA HIDROGRÁFICA DEL RÍO YAQUE DEL NORTE

Resumen: El conocimiento del componente estructural de la cuenca del río Yaque del Norte, representa uno de los temas a tratar en esta investigación, el cual cuenta con una superficie de 6,891 km², ubicada entre las regiones Cibao Noroeste y Cibao Norte de la República Dominicana, es un factor importante para determinar cuáles son las zonas que requieren de programas especiales para atender las necesidades existentes de mejoramiento. De ahí la importancia de poder identificar en cada una de las zonas que componen dicho cause. Las caracterizaciones de las personas que por mucho tiempo han invadido su cauce, así como los motivos que les han obligado a vivir en condiciones infrahumanas, son temas que trataremos en este estudio. En ese mismo orden, un elemento importante para caracterizar las condiciones de vida útil del cauce del Rio Yaque es analizar el grado de contaminación ambiental declarado o identificado por los residentes en las ribерas del río. Finalmente, en cuanto a los servicios sanitarios, los desagües de los servicios higiénicos a la superficie, o a huecos en el suelo, representan carencias sanitarias de importancia.

Palabras clave: Crónicas, Cuenca hidrográfica, Río, Agua, Contaminación, República Dominicana.



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CHRONIC: THE WATERSHED FROM THE NORTH RIVER YAQUE

Abstract

Knowledge of the structural component of the basin of the river Yaque del Norte, is one of the issues addressed in this research, which has an area of 6,891 km², located between the northwestern and northern Cibao Cibao regions of the Dominican Republic, is a factor important to identify areas that require special programs to meet existing needs for improvement are. Hence the importance of being able to identify in each of the areas that make up this cause. The characterizations of people who have long overrun its banks, and the reasons that have forced them to live in subhuman conditions, are topics discussed in this study. In the same vein, an important to characterize the conditions of life of the bed of the Rio Yaque element is to analyze the degree of pollution declared or identified by residents on the banks of the river. Finally, with regard to health services, drains from toilets to the surface, or holes in the ground, represent major health deficiencies.

Keywords: Chronicles, Watershed, River, Water, Pollution, Dominican Republic.

INTRODUCCIÓN

Según varias documentaciones consultadas, en la República Dominicana se han realizado varias modalidades de agrupación cuando se realiza un inventario de las cuencas hidrográficas del país. Cabe señalar entre ellas las realizadas por el Proyecto de Ley de Agua, donde se han agrupado en 42 cuencas hidrográficas, sin considerar los tramos costeros, SEMARN (2003). El Instituto Nacional de Recursos Hidráulicos, INDRHI las reagrupa en 54 cuencas, incluidos 19 tramos costeros; mientras que SEMARENA las ha agrupado en un total de 30 cuencas hidrográficas principales y 17 cuencas costeras, (GRUSAMAR, 2007).

La cuenca del Río Yaque del Norte es la mayor de la República Dominicana, con una superficie de 6,891 km², ubicada entre las regiones Cibao Noroeste y Cibao Norte del país. Nace a una altura de 2.580 msnm en el Pico Duarte, en la Cordillera Central.

Su recorrido es de 296 km, con un caudal medio de 60 m³/ seg. Comprende una gran red fluvial integrada por diversos ríos que atraviesan zonas montañosas muy húmedas y una región sumamente árida como la línea Noroeste, cuyo desarrollo depende básicamente del aprovechamiento de sus aguas, para los sembradíos. Sus principales afluentes son el Jimenoa, Bao, Ámina, Mao, Guayubín y Maguaca, SEMARENA. (2004).

METODOLOGÍA

El estudio a realizar será descriptivo pues, se consultarán libros, revistas científicas, boletines informativos y planes estratégicos. En lo que concierne a la recopilación de información sobre el tema, el objetivo de esta fase es la recopilación del material bibliográfico existente del tema, con el fin de realizar la fundamentación conceptual y técnica sobre el tema. La zona bajo estudio pertenece al área urbana del municipio de Santiago de los Caballeros, que es la zona de influencia del tramo del Río Yaque del Norte delimitado como área de estudio.

Según el documento Resumen Ejecutivo sobre el Balance Hídrico de República Dominicana elaborado por el INDRHI en el año 2007, fueron obtenidos los datos desglosados y transcritos, relacionados a la Región Hidrográfica Yaque del Norte, que a pesar de incluir otras cuencas en su consideración, aportan una información acabada sobre el balance hídrico de dicha región y ubica al lector a un conocimiento del inventario hídrico de la zona.

Localización.

La ciudad está conformada por 49 barrios y 269 sub-barrios, según la última actualización cartográfica de Santiago de los Caballeros.⁴⁴ Los barrios que se encuentran en el área de influencia inmediata al Río Yaque del Norte son: Ensanche Espaillat, Ensanche Bermúdez, La Otra Banda, Baracoa, La Joya, Nibaje, Bella Vista, Arroyo Hondo y La Yaguita de Pastor.

El municipio tiene una extensión territorial de 524.03 km² y limita al norte con la Provincia Puerto Plata, al sur con los municipios de Jánico y San José de las Matas, al este con los municipios Tamboril, Licey y Puñal, al oeste con los

municipios Villa González y Esperanza como se muestra en el Mapa 5. En su división territorial, el municipio de Santiago de los Caballeros, incluye los distritos municipales de Pedro García, Baitoa, La Canela, San Francisco de Jacagua y Hato del Yaque.

La Provincia de Santiago pertenece a la Región Cibao Central y tiene una extensión territorial de 2,836.51 km², constituyéndose en la tercera más poblada de Rep. Dominicana. Santiago de los Caballeros es la ciudad capital y municipio de la provincia de Santiago. Está ubicada en el centro de la región del Cibao. Abarca unos 36 km² de tramo continuo, y unos 70 km² de área suburbana, equivalentes a un 12% del área total del municipio.

La cuenca del Río Yaque del Norte, está localizada en la porción Noroeste-Suroeste de la República Dominicana. Su forma tiende a la de un paralelogramo con un ancho variable de 60 a 65 kms. El límite Sur de la cuenca lo constituye el parteaguas de la Cordillera Central, el límite Norte el parteaguas de la Cordillera Septentrional. Al Este, en la porción sur del afluente del Río Yuna, y en la porción Oeste, cerca de Santiago, un levantamiento apenas perceptible topográficamente que divide la región del Cibao en sus valles oriental y occidental. Según Yunén (1995), La parte occidental de la cuenca la forman las divisorias de aguas pequeñas corrientes que desembocan directamente al Atlántico. En la parte Occidental conformado por los municipios Dajabón y Loma de Cabrera, no son en su totalidad pertenecientes a la cuenca, aunque respecto al caso de Dajabón, Licey y Moca, explotan los recursos de la cuenca.

Hay dieciocho municipios y un distrito municipal con más de un 75% de su territorio dentro de la cuenca. La provincia de Santiago con sus siete municipios es la que tiene mayor territorio en la cuenca, seguido de Monte Cristi (seis municipios), Santiago Rodríguez (dos), Valverde (tres), Dajabón (uno) y La Vega (uno). La población total aproximada de la cuenca es de 1,478,113 habitantes (INDRHI, 2005) concentrados la mayoría en la provincia de Santiago con un 40% de la población de la cuenca, seguido por Valverde, La Vega, Monte Cristi, Santiago Rodríguez y Dajabón.

La población urbana sobre la cuenca es de un 53% y la población rural de un 43%, siendo la población urbana predominante sobre la rural, la cual según describe Yunén: "el comportamiento de la población urbana sobre la cuenca dista mucho de ser homogéneo y presenta una diversidad que debe tomarse en cuenta a la hora de plantear cualquier estrategia de gestión ambiental para planificar su desarrollo".

Las características que representan tanto la población urbana como la rural, es distinto para cada agrupación en particular y debe considerarse para el planteamiento de un plan de gestión a nivel de toda la cuenca del Yaque del Norte.

Hidráulica de la Cuenca del Yaque del Norte.

La cuenca del Río Yaque del Norte, está ubicada dentro de la Región Hidrográfica Yaque del Norte, considerada juntamente con las cuencas de los Ríos Masacre y Chacuey. Según los datos ofrecidos por el INDRHI en la Región Hidrográfica Yaque del Norte se encuentran quince presas.

Según estos datos, estas quince presas fueron puestas en operación entre los años 1973 y 2001, y en conjunto ocupan un área de cuenca de 2,353.5 km², con un volumen almacenado de 823.51 millones de m³, un área irrigada de 51,131 hectáreas y una potencia instalada de 194.9 mw. Cinco presas se dedican a consumo, riego y energía, cinco a riego y animal, una a riego y energía y cuatro a riego. Lo que indica que la mayoría de las presas se dedican a riego, y un 50% a generación de energía y consumo humano.

Resumen Análisis Balance Hidrológico Yaque del Norte.

Los datos sobre la disponibilidad de agua se refieren al volumen garantizado de la región hidrográfica en cuestión, así como los volúmenes embalsados en presas y lagunas. Los volúmenes de retorno se refieren a básicamente las cantidades de agua municipal y del riego que retornan a los cursos hídricos, las demandas de agua, en todos los renglones descritos, representan en total el agua requerida en la actualidad para los diversos usos.

A partir de estas informaciones se realizó una estimación expresada como Balance de Oferta – Demanda para la región hidrográfica del Yaque del Norte, la cual arroja un resultado de un 97% de presión hídrica, caracterizando el grado de presión de esta región hídrica como “fuerte”, A menudo el ritmo de utilización supera el de la renovación natural. Debe prestarse atención urgente a la ordenación intensiva del recurso y a la demanda de que es objeto. Es probable que los actuales mecanismos de uso no sean sostenibles y la escasez de agua se está convirtiendo en un factor limitado del crecimiento económico”. Este valor ubica la región hidrográfica del Yaque del Norte como la más crítica en el contexto nacional y permite focalizar como el área de estudio de suma importancia y valor desarrollo económico y vida nacional.

Delimitación del área de estudio del Río Yaque del Norte.

Varios estudios e informes consultados dividen la cuenca del Yaque del Norte en tres secciones. El Ing. Ramón Isidro Domínguez en su Libro El Río Yaque del Norte desde el Pico Duarte hasta Montecristi, dice que la cuenca del Río Yaque del Norte se divide en tres partes: Cuenca Alta, desde su nacimiento hasta Manabao, Cuenca Media, desde Manabao hasta Santiago y Cuenca Baja, desde Santiago hasta Monte Cristi. El área de estudio a tratar en este proyecto pertenece y es conformada por la cuenca media.

Para los fines de estudio, se delimita el área a considerar, dentro del municipio de Santiago de los Caballeros, considerando el tramo del Río Yaque del Norte desde el Puente Ercilia Pepín hasta El Barrio Rafey. Representando este segmento del Río Yaque en su trayectoria por la ciudad, donde recibe las más importantes descargas provenientes de la zona urbana de la ciudad. En este tramo se consideran los principales arroyos y descargas industriales, así como los asentamientos humanos ubicados en la periferia del municipio, así como las cargas de basura vertida en el río y sus afluentes de la zona.

Población.

La población urbana del municipio de Santiago de los Caballeros según el censo de población del año 2010 es de 963,422 habitantes. La densidad promedio de aproximadamente 5,838 hab./Km²., y su distribución presenta una evolución de desplazamiento centro-periferia, característica de centros urbanos de jerarquía mayor.

La mayor relevancia y objeto de estudio para este trabajo son el servicio sanitario y la recogida de basura. En el estudio consultado, convirtiendo esos porcentajes a números de hogares, para el servicio sanitario, 628 hogares presentan insatisfacción en esta necesidad y para la recogida de basura 2,685 hogares, para un total de 22,207 hogares del área de estudio.

La recogida de basura constituye la necesidad de mayor consideración en el momento de buscar soluciones a la problemática de contaminación del Rio Yaque del Norte. Analizando de manera más detallada, en cuanto al Servicio Sanitario, el Barrio La Otra Banda tiene 172 hogares con insatisfacción en esta necesidad, seguido por los barrios:

Ensanche Libertad, La Yaguista de Pastor, y la Joya con 97, 88, y 84 hogares respectivamente. En relación a la Recogida de Basura, el barrio con mayor insatisfacción es Arroyo Hondo, con 747 hogares insatisfechos, seguido por la Otra Banda con 385 hogares insatisfechos y la Yaguista de Pastor con 358 hogares insatisfechos.

Uso de suelo de la ciudad de Santiago de los Caballeros:

- **Residencial:** comprende un 80% aproximadamente de los suelos de la ciudad. Se divide en zona residencial para sectores de altos ingresos que ocupan un 17% del uso de suelo residencial. La zona residencial de nivel medio que representa un 51% del total y los residenciales del nivel bajo que ocupan un 54% del total de áreas residenciales.
- **Comercial e Institucional:** el comercio ocupa el 5.11% del uso de suelo de la ciudad. El uso institucional representa un 8.9% del total del uso de suelo de la ciudad.
- **Industrial:** ocupa un 4.7% del uso de suelo de la ciudad, y se concentra al noroeste de la ciudad, a orillas del Río Yaque, en áreas densamente pobladas y en las zonas peri urbanas de la ciudad.
- **Área Verde y Deportiva:** alcanza un 1.04% del total del área urbana. El mapa No. 7 permite visualizarlo de manera gráfica la división de áreas urbanas según su uso predominante en la ciudad de Santiago, resaltando la división realizada por la ONE, que lo divide en 38 sectores censales que continúen aproximadamente 133 áreas residenciales, entre barrios, urbanizaciones, repartos y ensanches.

En toda el área de estudio del tramo del Rio Yaque del Norte predomina el uso de suelo residencial, sin embargo, en la parte alta del tramo en estudio del Río Yaque del norte, donde está el Ensanche Espaillat y Ensanche Bermúdez, lo precede el uso de suelo comercial seguido por el industrial.

En la parte media, donde están los Barrios Baracoa y La Joya, el uso de suelo residencial es precedido por el comercial, y en la parte baja, donde están los Barrios Bella Vista, Yaguita de Pastor y Arroyo Hondo, además de la zona residencial, se aprecia en una proporción mayor a las demás, el uso de suelo para áreas verdes. En la parte izquierda del Río Yaque del Norte, se encuentran las Fincas de los Vargas ubicada al noroeste dentro del área de estudio, y cuyo terreno es baldío. Al suroeste esta la finca de los Peralta, cuyos suelos son también baldíos.

Resultados de la Actualización y Digitalización Cartográfica Santiago de los Caballeros elaborado por ONE/PNUD en el 2008, se obtuvo los porcentajes de unidades por tipo de uso de suelo al 2006 de los barrios periféricos al Río Yaque del Norte en la área de estudio.

Arroyo Hondo presenta el mayor porcentaje de uso de suelo destinados a viviendas, seguido por el Ensanche Espaillat, La Yaguita de Pastor y La Otra Banda. El uso de suelo para comercios y servicios lo encabeza el Barrio La Joya con una 27%, seguido por Nibaje con una 15% y Baracoa con un 10%. El mayor porcentaje de uso de suelo para industrias y talleres se encuentra en los barrios de la Joya y Baracoa con un 3% de su territorio destinado a esos fines,, seguido por el Ensanche Bermúdez y Nibaje con un 2%, mientras que el resto de los barrios analizados solo tiene un 1% de su territorio en este uso.

Sin embargo, el desarrollo económico, la industrialización y la implantación de modelos económicos que basan el crecimiento en el aumento del consumo, han supuesto una variación muy significativa en la composición de los residuos y de las cantidades en que son producidos. A pesar de la gran inversión del gobierno local en este problema, en los últimos años se ha generado una problemática medioambiental derivada del vertido incontrolado de residuos, lo que es causa de graves afecciones ambientales en la ciudad: Contaminación de suelos, contaminación de acuíferos por lixiviados, contaminación de las aguas superficiales, entre otros fenómenos.



*Vista
área del
Eco -
Parque
Rafey*

Hidrografía.

El principal elemento hidrográfico de la ciudad de Santiago, que a la vez es el elemento principal en estudio, es el río Yaque del Norte, cuya longitud es de 296 kms, de los cuales 14 kms bordean toda la parte sur de la ciudad.

Los principales elementos hídricos del municipio de Santiago son los arroyos Pastor, Hondo, Nibaje, Portezuela, Guazumal, Jacagua y Salcedo., así como el Río Yaque del Norte. El Plan Estratégico de Santiago 2002-2010 en la sección Ambiente del Diagnóstico Interno de la Ciudad, establece que el sistema hidrográfico de Santiago está dividido en cuatro zonas, correspondientes a varias subcuencas:

- a) La primera se ubica al norte del barrio de Los Salados.
- b) La segunda, cubre todo el territorio oeste del Yaque, y cuenta con algunos afluentes que desembocan directamente al río, tales como el arroyo Pastor y el arroyo Hondo. Desde esta zona parten los canales de riego Fernando Valerio y Luís M. Bogaert hacia el oeste de la ciudad.
- c) La tercera, contiene el arroyo Nibaje, seguido por la subcuenca Guazuma Pontezuela. Tiene afluentes que recorren toda el área sudeste de Santiago y está limitado al norte por la carretera Tamboril.
- d) La cuarta presenta cañadas aisladas que desembocan en otro arroyo como la de los Jardines Metropolitanos.

Agua.

El tratamiento y distribución del agua potable en la ciudad, está a cargo de la Corporación del Acueducto y Alcantarillado de Santiago, CORAASAN, creado en 1977, cuyo objetivo es implementar la operación, mantenimiento y administración del suministro de agua y alcantarillado de la ciudad, Aparte del municipio de Santiago, presta servicios a Tamboril y Licey.

La ciudad cuenta con tres fuentes de abastecimiento de agua: La Toma de Bao, La Toma de López, y La Toma de Pastor, las cuales funcionan por gravedad (90%) y por bombeo (10%). La población considerada como zona de influencia para CORAASAN era de 784,670 habitantes al 2002, y se considera una dotación de 600 lit/hab/día, la cual es la dotación actual del acueducto.

Los sistemas de acueductos actuales, según la cobertura de CORAASAN son: el Acueducto Cibao Central (114 MGD), Acueducto Nibaje (35 MGD) y Acueducto La Barranquita (0.9 MGD), de los cuales los dos últimos hacen la captación directa desde el Río Yaque del Norte dentro del área delimitada como zona de estudio.

En la actualidad en la provincia de Santiago, el 38.9 % de la población, no cuenta con la dotación de agua potable dentro del hogar, Massa (2009).

Energía.

La distribución de la energía eléctrica en la ciudad está a cargo de una compañía concesionaria llamada EDENORTE. De la energía total que se distribuye solo es utilizada por el 60% de las personas que tiene contratos con EDENORTE, de los cuales sólo un 50% paga el servicio regularmente. La cobertura de los

servicios de electricidad es casi efectiva en el área urbana de la ciudad, (99% aprox.). Las industrias, comercios y viviendas consumen el 50%, 30% y 20% respectivamente de una carga ofertada estimada en aproximadamente 150 megavatios diarios para la ciudad.

Estructura Vial.

Santiago de los Caballeros es considerado como una ciudad conexión de servicios educativos, comerciales, de salud, recreativo, polo industrial, y centro de intercambios de la región del Cibao. La estructura vial de la ciudad está formada por un tramo de calles y avenidas que se expande en todas direcciones. Tiene un anillo de circunvalación con la Ave. Mirador del Yaque y la Ave.

Estrella Sadhalá, con conectores secundarios que se vinculan con las demás vías internas de circunvalación. En general, todas las calles de Santiago se encuentran en entre las principales vías que rigen la infraestructura vial de Santiago, la más pertinente a nuestra área de estudio es la Ave. Mirador del Yaque que recorre la ciudad noroeste-sureste entre el barrio el Ingenio y la Fuente, pasando por los márgenes del Yaque del Norte. En sus contornos se localizan los barrios pobres de la ciudad y se concentran cerca del 30% de las industrias ubicadas en la mayoría de las márgenes del Río. (Corral et al, 1999).

CONCLUSIONES

Es notable la inequidad entre el crecimiento poblacional de Santiago y la prestación de servicios públicos, los cuales resultan insuficientes para atender a sus ciudadanos, lo que además representa dificultades visibles ante la tendencia actual de la ciudad.

Existen importantes deficiencias ambientales, relacionadas con el manejo adecuado de los desechos sólidos y afluentes. El control a la contaminación por aguas servidas se considera deficitario, además de que no se conoce la eficiencia de estos sistemas y su posible efecto en los sistemas de aguas subterráneas. Datos del Censo 2010 explican que un 89.65% de los hogares del municipio eliminan la basura a través del Ayuntamiento, lo que indica que aproximadamente unas 2,000 toneladas (mensuales) de residuos no son tratadas de manera adecuada, generando posibles daños importantes al medio ambiente, por efecto de la disposición inadecuada de los mismos.

Es muy importante resaltar que el 38.9 de la población de Santiago no cuenta con agua dentro de sus hogares representando este un indicador el cual está estrechamente vinculado con la calidad de vida de la población, con la higiene personal y la de los alimentos que consumen. En esta oportunidad se ha tratado de identificar una situación crítica, que es la ausencia de provisión de agua potable por red pública dentro de la vivienda, es decir, que se incluyen las categorías correspondientes a la provisión desde el acueducto en el patio de la casa, la disponibilidad solo por llave pública, agua de manantial, río, arroyo, pozo, lluvia y/o camión tanque.

La precariedad en las viviendas, constituye uno de los principales problemas sociales, visibles en las ribera del Rio Yaque , especialmente en los que se

encuentran establecidos en las márgenes del río. Es evidente el hacinamiento, la falta o baja calidad de los servicios públicos y las malas condiciones de las viviendas cuyas paredes y techo no cumplen con los requerimientos mínimos de higiene y seguridad.

Muchas de las situaciones abordadas en este trabajo requieren la urgente implementación de medidas de la autoridad Nacional y Local, que busquen reducir los desequilibrios interprovinciales, pero básicamente que tiendan a mejorar las condiciones de vida en la provincia, de Santiago, que se transforma aún en más adversa en los sectores sociales de menores recursos.

Finalmente la educación y concientización de los residentes de los barrios periféricos al río Yaque del Norte para el uso, aprovechamiento y disposición de los residuos sólidos y la ciudadanía en general sobre la valorización de este recurso hídrico, es otra estrategia que deben implementar las autoridades locales, tanto de medio ambiente como del ayuntamiento de la ciudad.

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Letters to the Editor

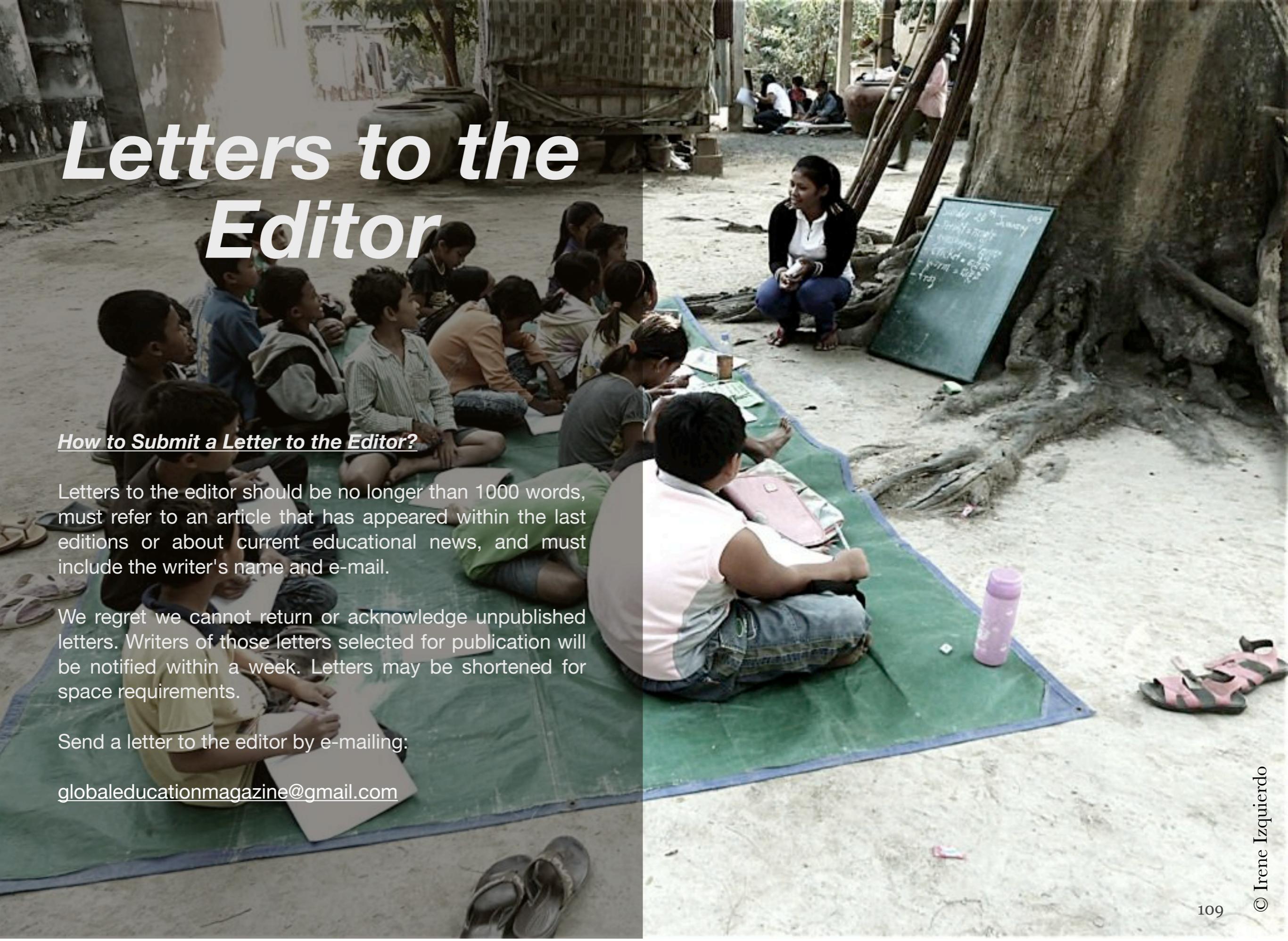
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Letters to the editor should be no longer than 1000 words, must refer to an article that has appeared within the last editions or about current educational news, and must include the writer's name and e-mail.

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Send a letter to the editor by e-mailing:

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Water - The Natural Health for the Planet

*The basic need for the life
The divine cleansing for the body..
The natural protection for the health..
The existence for the earth and living..
The victim for each human stupidity!!
The survivor of nature naturally..
The gift from nature to balance..*

- Dr. Rashmi Chandran
Naturalist & Creative Artist

Global Education Will Generate Global Growth

The globalization of business creates both challenges and opportunities. John Danilovich, Secretary General of the International Chamber of Commerce, describes how globally-standardized professional education could be the key to success

The business world is globalizing. For evidence, look no further than the growth in south-south trade (i.e. trade between emerging markets). It's a trend that's set to continue – with south-south trade expected to account for a third of all global trade – and nearly all of global trade growth – by 2020. Realizing this potential is one of the most important challenges facing business in the current environment.

At the International Chamber of Commerce (ICC), we think education is key. Strong education yields strong growth. And global business growth will need global business education.

Certainly, a key factor in stimulating this growth will be standardization in terms of professional education and certification. What we need is a single, global, standard that reaches and is recognized by all – equipping people with the best tools for tackling professional situations. It's not enough that individuals and organizations worldwide should have sound business practices – their practices must also be compatible with one another. A universal standard eliminates barriers to business that arise when the business practices of different cultures prove incompatible – clearing the path for the global projects and global collaboration that drive economic growth worldwide.

This is the reasoning behind ICC's groundbreaking educational initiative, the ICC Academy. Aiming to satisfy the need for standardized global business education, the Academy will look to provide world-class, certified business courses via a dynamic digital platform. These courses are designed to nurture the highest standards of business proficiency and ethical conduct – promoting the skills and habits that are necessary for creating global partnerships.

To this end, ICC has enlisted its own business experts and practitioners to devise and teach the Academy's curriculum. Their expertise will be supplemented by content from external advisors in senior-business and policy-making positions. What's more, the Academy will also call on ICC's extensive global reach – with a business network spanning millions of organizations in over 130 countries – to ensure global recognition and influence for its courses.

Delivery

Also key to unifying the world's business practices is the delivery of professional education. Delivering courses digitally – via an online platform – enables people from completely different geographies to attend the same course at the same time. They can even take part in group-based project work – collaborating with other individuals, in spite of the difference that

separates them. Furthermore, digital delivery means pupils can fit their study around busy work schedules.

For this reason, the ICC Academy uses a dynamic digital platform – one that facilitates precisely this kind of accessible, collaborative education. The reach and flexibility that this affords is key to increasing global exposure to high-quality education. And its value in the emerging markets – where there is potential to expand both growth and the provision of business education – cannot be overestimated.

Centralized and standardized

Centralization is also important for standardizing business education. By developing courses centrally and distributing them universally, the standard of education is made the same everywhere in the world, with remote and undeveloped areas having access to the same quality of education as in developed economies. We believe this a key requirement for encouraging equality in development opportunities.

We have chosen to centralize the ICC Academy in Singapore – in view of the city's established excellence as a trading and finance hub. What's more, this location complements the Academy's inaugural range of courses, which focuses on banking and includes almost 70 online courses and three global certificates in trade finance. Of course, the curriculum will quickly broaden to include all areas of ICC business expertise.

Shaping the future

Of course, it is important to remain attuned to new developments – adapting to meet the demands of a rapidly-changing business environment. New courses, new technology and new educational techniques will all be features of the Academy's future offerings – making it an ideal partner for corporates and multilateral institutions. Through this, the Academy will help these companies develop their employees – and in turn their competitive edge.

Fred Hendry

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Along the River – Provence, France

It is while canoeing and mountain biking that children, pre-teens, teenagers or families learn to become Scientists along the riverside. Stopping at different biodiversity hotspots, taking samples and measurements, not forgetting the catch of the day, participants are ready for a real scientific monitoring between rivers...

A fixed camp base, camping at the end of the day, staying up all night at the water-side, this activity is targeted at the adventurous spirit that lies within kids!

[http://www.vacances-scientifiques.com/+
-Au-Fil-de-l-Eau,555+.html](http://www.vacances-scientifiques.com/+Au-Fil-de-l-Eau,555+.html)



Along the River!

During the course of this Programme, participants will all be immersed in different scientific studies and projects relating to aquatic life in forests and highlands.

Archaeology fans, crazy about little aquatic animals, will study in groups how to save the forest by a unique discovery on Watercourse Management.

Domains: Environment, Biology, Ethnology, Anthropology,

Ecology, Water, Zoology, Agronomy
Haut du formulaire

>> Group Project

Participants will discover the techniques of studying river courses and conduct research under the guidance of scientific educators with the Swiss-based NGO Objectif Sciences International.

This activity is the result of merging two major themes "Along the River" and "The Time of our Ancestors"! Therefore,

allowing the NGO to satisfy at the same time kids passionate about Environment and Archaeology.

Many rivers are located around the Science Camp and they are just waiting for enthusiastic kids to come explore them. Going out on the fields and conducting a real naturalist research will be the major activity on the ground – including discovering the river world: insects, frogs, fish, plants...



cover interesting facts about rivers, including taking water samples that can be later analysed in the laboratory.

This semi-archaeological semi-biological activity allows participants to discover the world in which we lived in during the Neolithic period. Usually, kids don the explorer's costume and participate in a real scientific research. By creating a village of lake cabins, they re-create the lives of early men and hence go back in time. They also reproduce tools used in the past and make use of them, thereby learning to live like our ancestors.



Kids learn to recognise and understand what exactly a river is, while establishing the relationship between the aquatic fauna and flora on the one hand, and land animals on the other hand. They also conduct a whole lot of experiments to dis-

This great project in which kids and teens take part in, teaches them to reconstruct a part of the Neolithic village in order to understand the evolution of Man since that period. Then, they observe how Neolithic farmers cultivated their plants and reproduced seeds.



Children taking part in this activity become key actors in the advancement of this unique scientific project, oriented towards revisiting the uses of rivers and wetlands to develop and protect the biodiversity of the forest.

In summer 2008, kid-participants in the Science Camp named 'Forest Mystery' took part in conducting a research on the composition of the forest soil and its inhabitants. For some days, they joined forces with the "Along the River" participants measuring the flow of underground water in the forest of Praboure in the Region of Auvergne in France...

Provence (France)

Located in the Vercors and Dévoluy, the buildings used by the NGO Objectif Sciences International allow participants to enjoy breathtaking beautiful landscapes, and also take a breath of fresh air... while being re-energized for the tasks ahead!

The concepts studied during this Programme

Ecosystems, Renewable Energies, Anthropology, Amphibians, Biology, Population Biology, Ceramics, Water, Fossils, Excavation, Biotic Indices, Insects, Photosynthesis, Physiology, Polished Stones, Aquatic plants, Fish, Prehistory, Early Man, Reconstitution, Rivers, etc...

Equipment used

Aquarium, petri dishes, kick net, herbarium, binoculars, mobile lab, magnifier, Binoculars, Archaeology materials, laboratory materials, microscope, measurement tools, digital photography, Archaeological remains, etc...

Information and registration:

www.vacances-scientifiques.com

Or your usual contact within the NGO objective Sciences International

Email = contact@osi-ngo.org or call us at
Tel Switzerland: 022 550 36 75

Tel Québec : +1 (514) 907-2351

Tel France : 04 73 95 83 77

Tel Belgium : 023 181 251

Greece and Europe Beyond Left vs. Right

Syriza, the Greek left party, won the election last Sunday and is now setting up a government in alliance with a rightwing, nationalist party, Anel. From a traditional perspective this left-right wing coalition sounds surprising, weird, and perhaps even worrying. However, this is not the first time this kind of trans-ideological coalition is formed within the European Union political system. Italy has had the last 3 governments (Monti, Letta, and now Renzi) with center-left and center-right party sharing power. In Greece, the previous government included both the socialist party (Pasok) and the conservative party (New Democracy). In Germany Merkel's party CDU is now in government with the socialist party, SPD. At the EU level, the current European Commission is the byproduct of a grand coalition between the European People's Party and the European Socialist Party. What is going on in Europe? Is the left vs. right cleavage still useful to understand politics?

The recent financial crisis has indeed brought a political epiphany. As a matter of fact, as a consequence of the economic crisis a number of national political systems have dramatically undergone significant changes. Popular support to traditional political parties, both of centre-right and centre-left, has declined consistently. New populist movements have emerged with vehemence. The main economic policies have been «externally decided» alongside with European and international institutions. Trans-ideological governing-coalitions have ultimately seen the light, with conservative and progressive parties governing together as pragmatic alliances in the name of the EU orthodoxy.

If we stick to the traditional paradigm Left vs. Right we will not be able to understand such dramatic transformations. Specific circumstances, contingent and tactical decisions or the constantly present «there is no other alternative» only offer partial explanations for such events. Events which might seem, at a first look, indeed contingent, spurred by a state of financial emergency, and therefore in the last analysis almost insignificant.

Reality is instead that in the age of globalization and regional integration we find ourselves facing a phenomenon that is difficult to be explained. The financial crisis is unveiling a new political constellation that can be hardly understood by drawing upon the old political categories of Left and Right. The concepts on which we have relied to make sense of the political reality of much of the 20th Century are now emptied of their heuristic force.

A better perspective to capture these political transformations relies on adopting a new fundamental cleavage. While in the past the political competition was about Left and Right claims, nowadays the fundamental cleavage pivots on the tensions between supranational integration vs. national preservation of economic, social and in last analysis political dynamics. It is in fact by referring to the political positioning on policy issues that are central to the concept of globalization, such as markets' integrations, sovereignty limitations, participation in regional organizations, acceptance of supranational orthodox policies and to the adoption of universal standards, that we can best understand the present-day political dichotomy.

It is precisely in a moment of crisis as the one we are experiencing in Europe that the debate on these fundamental issues re-opens. And it is in this moment that it is easier for us to realize the fundamental dichotomy characterizing our political system. During the current financial crisis, the political debate has in effect moved from secondary issues to macro-economic and macro-political issues that have much to do with the positioning of the country vis-à-vis global and regional integration. In such a way, the politico-ideological frame has indeed dramatically changed.

From this perspective what was unclear becomes crystal-clear. The political parties that have supported the grand coalition governments in many countries in Europe, regardless their ideological affiliation, are parties that share a pro-globalization attitude. With minor differences, they agree with complying with European and international standards on good governance, even in case this means giving up a part of their national sovereignty and paying high social costs. Political and economic integration is considered the default position that promises widespread gains in the mid-long term.

By contrast, the parties at the opposition of these governments are all localist. Notwithstanding the substantial differences of their ideological positioning, they share the principle according to which the local context should have the priority. They share the suspicion and the hostility towards any process which, in the name of supra-nationalism, dismantles the context of rooted participation. Political and economic integration is here seen as a project guided by technocratic elites which in last analysis benefits the centers of transnational power weakening and depleting the local contexts. From such a perspective, the more we delegate power supranationally, the less we will be able to democratically control it.

The fact that centrist globalist governments are more popular tells us something about the political hegemony of globalism over localism. Such a distribution of forces is not however something that we have to assume in a static way. This situation can easily evolve: the recent elections for the European Parliament in last May and the ones in Greece suggest perhaps a change of direction. Politics may change as much as it was different in the past: Think for instance about the much different role and weight that localism and nationalism had in Germany and Italy during the 1930s.

Politics is revealing the deep meaning of its political cleavage. In normal times, not times of crisis, such fundamental cleavage is perhaps more difficult to be detected because it taken for granted and therefore not discussed: politics usually plays on a simpler game field. However it is in moments of crisis that such fundamental cleavage emerges. In those moments we can better understand the contours of the political frame of numerous political systems and thus understand what politics is truly about in the age of globalization.

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Abu Dhabi's Education Council Continues to Find New Applications for GIS

Abu Dhabi is the capital of the United Arab Emirates, a federation founded in 1971 from seven ancient Arabian Peninsula sheikhdoms. Due to the wealth derived from its extensive hydrocarbon deposits, Abu Dhabi has developed a modern, forward-thinking state that embraces its past while preparing for the future. One of its long-term initiatives is the development of a comprehensive information infrastructure to serve the entire emirate, much as a utility company provides electricity, gas, or water.

The Abu Dhabi Systems & Information Centre (ADSiC) was created in 2005 by Abu Dhabi's Executive Council. The role of the ADSiC is to develop and support various government initiatives in the establishment of a modern, efficient, citizen-centric e-government platform.

Spatial Data Infrastructure Initiative Launched

With the expanding use of geographic information systems (GIS) throughout the country, the ADSiC launched the Abu Dhabi Spatial Data Infrastructure

(AD-SDI) initiative in 2007. Its mission is to facilitate the sharing of geospatial data among government agencies and other stakeholders. The AD-SDI initiative is made up of 56 government and private agencies including virtually every industry and agency in the emirate. All AD-SDI members are mandated to share their spatial data with one another, excluding data related to the security of Abu Dhabi.

One member of the AD-SDI is the Abu Dhabi Education Council (ADEC), which has used Esri's ArcGIS software for several years. "We began using ArcGIS in 2009," says Pakrad Balabanian, GIS team leader at the ADEC. "Our first project was the School Finder. Data for this project was very easy to obtain, since we are part of the AD-SDI program. So we got ready-made basemaps, the road network, census

data, and so on. SDI really helps extend the use of GIS in Abu Dhabi."

ADEC Moves GIS outside the Box

ADEC's School Finder allows residents to explore schools throughout Abu Dhabi, using various criteria such as location, type, grade level, and gender. It is an important and popular application because there is a regular influx of new families to the emirate that are looking for schools for their children, and this helps them get settled more easily.

Realizing the advantages of geoenabling its entire student database, the ADEC integrated ArcGIS with its enterprise student information system, which contains detailed data about Abu Dhabi's approximately 350,000 students, 18,000 teachers, and 450 schools. This allows administrators to easily monitor student performance at specific schools, compare general progress among neighboring schools, or track an individual teacher's qualifications and workload.

In addition, the ADEC's Facilities and Infrastructure department is using GIS for land and facilities management.



"The government had allocated plots of land to the ADEC for educational purposes, but there was uncertainty about the exact location of the plots and their current use," said Balabanian. "We created the Land Bank application to manage and analyze these plots. We are also using this application for the 10-year ADEC master plan so that we can determine where we should be building new schools and refurbishing older ones."

In 2012, Abu Dhabi signed a nationwide memorandum of understanding (MOU) with Esri to further expand the country's use of GIS. The MOU provides access to all Esri GIS software products to every government agency and school in the emirate.

ArcGIS Online Supports the Goals of the New School Model

"With the implementation of the MOU with Esri, we began to explore other possibilities for GIS at the ADEC," said Balabanian. "We saw great opportunities to include it in the e-learning modules of our New School Model."

Recently introduced in Abu Dhabi public schools, the New School Model was developed over a number of years by local educators and consultants. This is a student-centered learning approach in which students are engaged in a technology-rich environment that is responsive to their individual abilities and needs. The goal is to foster students' critical thinking, communication, and problem-solving capabilities while preparing

them with twenty-first-century skills for future education and employment.

Because the New School Model is being gradually phased into the entire school curriculum, it was decided to introduce ArcGIS Online in a pilot project for sixth-grade students. Generally between 11 and 12 years old, they have had some previous experience with digital technology, so it is familiar to them, and applying GIS to classroom assignments can help increase their understanding of other subjects during their secondary school education.

Esri education team members and staff from GISetc, a private GIS educational consultancy, worked with Abu Dhabi educators and ADEC curriculum developers to integrate GIS exercises into the sixth-grade curriculum of the New School Model. Five exercises were developed that included mathematical concepts such as map scale, linear measurements, and perimeter calculation, as well as science and geography lessons.

Collector for ArcGIS a Hit with Students

Of particular interest to the students was collecting data about the local mangrove trees and plotting that data on maps for a science lesson. Mangrove trees live in salt water along the Abu Dhabi coastline, providing important animal habitat and erosion control. To complete this lesson, students paddled kayaks about a mile to Mangrove Island, where they performed various measurements, such as determining the height and number of trees in a specified location as well as collecting information about the land surrounding them. Both boys and

girls participated. "We were really happy to receive the encouragement and support from the parents of our students," said Balabanian. "GIS is a twenty-first-century technology, and all of our students can benefit from learning and applying it."

Students used Collector for ArcGIS on their smartphones to record their data for later use with ArcGIS Online. Their familiarity with smartphones helped lower barriers to learning this new technology.

After an academic review, the pilot project was deemed a success, and the ADEC plans to implement GIS lessons in all sixth-grade classrooms next year. It is currently developing new exercises for the seventh-grade pilot project and plans to incrementally add GIS-related exercises for all students from the sixth through twelfth grade.

The Future of GIS at the ADEC

"Our goal is to enable students to use GIS like any other digital tool, such as Microsoft Word or an Excel spreadsheet," says Balabanian. "We don't see teaching GIS as a separate subject; we want to instill in them the concept of spatial thinking so that using maps is part of the way they naturally work. We want them to critically examine phenomena and help effect change when needed. GIS can help our students become responsible members of the global community."

By Jim Baumann, Esri

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THE CHANGE SCHOOL

Website: thechangeschool.com

About The Change School

The Change School helps people align values and life choices at every stage of your life. We are a lifelong learning institute combining entrepreneurial grit, emotional intelligence and competency development to help people realise their potential and move forward. We create unique experiences designed to help students connect the dots and take action with confidence, clarity and emotional intelligence. Our 21-day Signature Programme [Change Ventures](#) creates the space for introspection, entrepreneurship and reaching your mental and physical best – once a year in Bali, Indonesia. Applications are accepted on a rolling basis.

We believe that, with the right tools, change can be a force for good.

Upcoming Programmes

1. THIRD CULTURE KID (TCK) SUMMIT:

Our inaugural 2015 Summit is a year-long series of monthly online discussions with subject experts, practitioners and influencers to build deeper insights into the world of TCKs - one connection at a time. Beginning this March, each month will cover a different theme and topics for discussion that will be aired on Google Hangouts and shared on our website. We invite you to join us and our Chief Nomad @eddieharran as we build this growing community and shape the future of global citizenship and social good. For more information and the full schedule of monthly themes, visit thechangeschool.com/the-summit

2. AWAKENING YOUR CREATIVE GIANT:

Are you looking to build creative confidence? Seeking a new experience to expand your thinking? Learn to connect the dots and find new ways of problem-solving through cultural immersion, interactive workshops and a value-led community to reach new heights of creative leadership. Applications now open at thechangeschool.com/aycg15

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2015 PROGRAMMES



AWAKENING YOUR CREATIVE GIANT

26 Apr – 30 Apr 2015 Bali
Early bird prices start at USD \$2,499

GET OUT OF YOUR HEAD

24 Aug – 1 Sep 2015 India
Early bird prices start at USD \$2,899

CULTURE HACK

Dates TBC India
Early bird prices start at USD \$2,499

PRODUCTIVITY IN THE AGE OF MINDFULNESS

25 Jul – 31 Jul 2015 Sri Lanka
Early bird prices start at USD \$2,899

LIFE BY NUMBERS

4 Dec – 7 Dec 2015 Singapore / Hong Kong (TBC)
Early bird prices start at USD \$2,199

AMPLIFIED CONSCIOUSNESS

7 Aug – 16 Aug 2015 Sri Lanka
Early bird prices start at USD \$3,299

CHANGE VENTURES

13 Oct – 2 Nov 2015 Bali
Early bird prices start at USD \$3,150

Visit THECHANGESCHOOL.COM/PROGRAMMES for more details.

Saudi Arabia: Changing Times; New Opportunity

The changing face of Middle East education heralds new opportunity for astute UK companies able to provide specialised niche services to Arab markets. One firm looking to ride the new wave of opportunity is online self-assessment and improvement planning software specialists Mesma, whose director Louise Doyle, fresh from a fact finding visit to the region, explains more.

Across the Middle East, the speed of change can seem breath taking at times. Shifting social mores, the blurring of cultural divides and aspiring ambition combine to provide a potent mix that's propelling the region ever forward at unparalleled speed. The dynamic economies of Dubai, Abu Dhabi and Qatar might be the ones currently in the ascendancy but it's also the older, more established regional players, notably the Kingdom of Saudi Arabia (KSA), that are moving also to meet the challenge posed by the younger tyros of doing business in the modern global economy. KSA is investing billions to assure its position as a strong, vibrant and educated force – one capable of playing a significant role in a fast evolving geo-political landscape that's built on the talents of a resourceful and skilled workforce.

However, there are issues to address. The current skills base in the KSA is essentially one founded on an immigrant workforce. The government has an extensive programme of activity designed to train Saudi nationals with the knowledge and skills necessary to meet its own requirement for a future workforce. Furthermore, 40% of young Saudi Arabians under-30 are unemployed. The case to create more jobs in the private sector, up-skill the workforce and unlock the challenges of women's ability to work in a highly conservative and religious society.

According to the Saudi Skills Standard (SSS), less than 10% of the Saudi workforce participates in technical and vocational training. So to catch up with countries in the developed world, it

needs to increase this number by almost 50%. This will be achieved over the next few years through a massive expansion of colleges, student places and targeted employability initiatives. But simply increasing the number of young people in training is not enough. It will be critical to ensure the training is high quality, bespoke and delivered to meet the needs of employers.

High value opportunity

We are seeing the investment in vocational education provision ramping-up to meet future needs and the UKTI has identified the Saudi education and training market as a high value opportunity for British companies. There has been a number of significant business opportunities already secured recently by UK education and training providers in deals worth more than £1 billion – for instance, UK providers already operate many vocational and technical Colleges of Excellence (CoE) for men and women across KSA.

New vocational colleges, built and operated by British consortium through the KSA's Colleges of Excellence (CoE) programme, are springing up across the country. Now well into its second phase, the initiative represents a significant investment in technical and vocational education and training in Saudi Arabia. There are now 36 state-of-the-art colleges with more expected to come on stream including a cluster of three women's colleges in the north of the country, in the towns of Al Jouf, Arar and Qurayyat.

The new, purpose-built facilities provided by the Saudi government, will cater for up to 500 students per college in the first year, rising to 2,000 per college within five years. Students will focus on English language training in the first year, before specialising in vocational areas including healthcare, business, IT and finance, hair and beauty, fashion design, and agriculture. Subject areas have been chosen by the government to support growing employment needs in distinct parts of the country.

Activate Learning will develop the colleges' curriculum and management in partnership with GEMS Education Solutions, an international educational consultancy already delivering education in Saudi Arabia, and Moulton College, which will provide particular expertise in the agricultural programmes. In time, this is expected to include the development of the learning company model, which sees students at further education colleges immersed in real-world, commercial operations as an integral part of their studies.

There's also significant potential for future business – worth in excess of £100 million to British companies – while opportunities exist across all sub-sectors including schools, vocational education and training, higher education and CPD/professional training. Moreover, UK education and training expertise is highly prized in the KSA across a range of industry sectors.

The SSS, a relatively new body, is the organisation charged with overseeing much of this rapid development in KSA's education provision, ensuring skills standards are applied and training quality is monitored with integrity and objectivity. Its also tasked with ensuring that qualifications derived from National Occupation Skills Standards (NOSS) are fit for purpose as well as external assessment, and inspection and review.

For niche specialists like Mesma and others this all heralds significant commercial opportunity. The remit of the SSS is broader than that of the UK's Ofsted, gearing up to meet its responsibilities for both delivery and inspection of curriculum - and of course, easy-to-use and cost efficient self-assessment and improvement planning is a beneficial part of a process to establish an effective institutional review method to assess the quality of training received by trainees.

SSS framework compliance

Demonstrating a robust, ongoing process for self-assessment and improvement plan is a key part of the SSS framework and a strategic internet-based tool like Mesma, which can be controlled remotely from the UK and offers multi-site connectivity, can provide college operators in the KSA with the confidence that their assessments are in line with the latest SSS framework.

It meets evolving requirements in the KSA with software that helps providers better prepare and be ready for inspection regimes. The whole process of self-assessment is improved managed and completed utilising easy-to-use tool and features incorporated within the software before being linked to robust improvement plans giving overall system control and monitoring. Quality assurance reports, policy documents, processes and guidelines as well as other important documentation can all be stored online in one place within Mesma for quick and convenient access and reference from any location. The system can also monitor activities allocated to other staff to track progress and completion, providing the confidence that assessments are in line with the SSS frameworks.

There's clearly unbridled opportunity in the KSA on the back of the government's renewed ambition and new investment. The chance is there for a new generation of smart, go-ahead, dynamic young companies like Mesma to overcome the challenges, and reap the benefits, with exciting new products and services which meet the education requirements of this most exciting and rewarding of countries

More about MESMA

Mesma was set-up in response to changes implemented by education watchdog Ofsted, which led to schools, colleges and independent providers receiving reduced notice of inspection. It is owned and operated by three directors - Neil Donkin, Carole Loader and Louise Doyle - who between them have more than 30 years' experience in business and working in with the education sector. More at www.mesma.co.uk

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Summer Schools@EXPO2015, Bicocca lancia la formazione internazionale sui temi dell'Esposizione

Tra maggio e ottobre partono 23 corsi di una o due settimane in lingua inglese dedicati agli studenti internazionali: tra i temi cibo e diritti, cultura, sostenibilità e salute. Lezioni nel Campus Bicocca, alla Lake Como School e nel Centro di ricerca e formazione dell'Ateneo alle Maldive. Impegnati oltre 100 docenti e ricercatori per più di 600 ore di lezione. Iscrizioni aperte dal 1 febbraio.

L'Università di Milano-Bicocca lancia il progetto Summer Schools@EXPO2015, un programma di corsi dedicati ai temi dell'Esposizione Universale aperti a studenti stranieri e italiani e tenuti in lingua inglese. Tutti i programmi e le informazioni sono sul sito dedicato summerschoolexpo2015.com appena lanciato online.

Le "scuole" proposte sono 23, tutte in lingua inglese, e impegnano oltre 100 docenti e ricercatori dell'Università per oltre 600 ore di lezione. Gli argomenti, organizzati in macro-aree, spaziano da Health and Nutrition a Food and Science, EXPO, Cultures and Social Challenges, ICT, Food and Communication fino a Global Business, Sustainability and Food Rights. Il progetto Summer Schools@EXPO2015 è patrocinato da EXPO Milano 2015 e dal Comitato Scientifico Le Università per EXPO 2015 del Comune di Milano.

I corsi si svolgeranno sia nel Campus Bicocca a Milano sia alla [Lake Como School](#) e al Centro di Ricerca e Formazione [Marhe Center](#) dell'Università di Milano-Bicocca nelle Isole Maldive. Saranno attivi tra maggio e ottobre 2015 e avranno una durata che va da una a due settimane. È prevista per ogni corso l'assegnazione di crediti. Oltre alle lezioni, tutti gli iscritti avranno accesso a una visita gratuita presso il sito espositivo EXPO.

«Il progetto Summer Schools@EXPO2015 - dice Andrea Biondi, pro-rettore all'Internationalizzazione dell'Università di Milano-Bicocca - è stato pensato e organizzato proprio per diffondere e valorizzare a livello internazionale, attraverso il sistema di competenze formative e di ricerca che possiamo mettere a disposizione come Università, gli importanti argomenti, come salute, sostenibilità e diritti, connessi al tema EXPO "Nutrire il Pianeta", argomenti che sono anche sfide con le quali le società si stanno già misurando. Questa iniziativa si inserisce nell'ormai consolidata attività di programmi internazionali di Summer e Winter School che abbiamo avviato sin dal 2004 e che ci auguriamo ottenga lo stesso successo».

L'iscrizione ai diversi programmi estivi sarà possibile a partire dal **1 febbraio 2015**. Tutti i dettagli sui programmi (contenuti, calendario, costi di iscrizione e modalità di pagamento, numero dei crediti assegnati) sono consultabili sul sito www.summerschoolexpo2015.com.

Il progetto Summer Schools@Expo2015 rientra tra le iniziative **Bicocca for Expo**, lanciate dall'Ateneo in occasione dell'Esposizione Universale. Ricordiamo, fra le altre, la curatela scientifica del Cluster del Riso, l'accordo con la Repubblica delle Maldive per la progettazione dei contenuti dello spazio espositivo nel Padiglione Isole, gli Science Corner, l'indagine "Experando Expo" sulla conoscenza di Expo e sulle attese del dopo Expo da parte dei giovani universitari e i Percorsi Laboratorio Expo-Fondazione Feltrinelli su antropologia e sociologia urbana. Tutti i progetti sono raccolti nella scheda [Bicocca For Expo](#).



Per maggiori informazioni

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"Educating effective future leaders is a high responsibility"

His Highness The Aga Khan

I am especially delighted to write in honor of the *icon* Aga Khan. His projects for humanity are innumerable. Health, education, religion, and poverty are the main of his interest. All of Aga Khan organizations are based on transparency, independence, responsibility, and nonprofit.

Through his future vision to create a coherent system in the world, he received many awards from different countries. In addition, his way of explaining the fundamental message of the religion made him a real leadership of the Muslims in the world.

The Aga Khan was and continues to be concerned about the unhealthy state of education and science in the developing world. Face this reality, 300 schools has been created in Asia and Africa, which constitutes an educational institutions very powerful (1). This environment provides quality preschool, primary, secondary, and higher secondary education services to students. Created by his *highness*, the schools are installed in the village of Africa, which have a priority of development. This ability to change this environment has had a great reflection to change the mentality of work of people and press them to create and innovate. This contribution inspired by Islam aims to achieve the ethical vision of society and eliminate the ignorance that remains the real obstacle to advance humanity. In addition, the cultural and economic impact is enormous. In his speech, the *Imamat* emphasized the education for all children irrespective of religion, ethnicity or gender. The environment invented by the *polymath* Aga Khan seeks to strengthen the role of the private sector include health, tourism, and industry. His Highness thinks that the creation of isolated schools hasn't reached the pinnacle of a strong educational system. For this reason, he initiated the academies that represent a network between schools. This philosophy of Academies has a magical effect on the behavior of the student. Working in a connected environment and linked to a real problem of the life allows student to make a difference. The conviction of the *thinker* Aga Khan beyond the construction of environments for education, but also to equip them with a high level of technology that allows students to be at the same level and skills compared to other students in the world. This responsibility of thought did not forget the role of the daughter and wife in the Aga khan system. In 1966, His highness claimed that "*There was no school*

building. And, there was little enthusiasm for educating girls" (2). The *leader* Aga Khan is not limited to the thought, but also the application of his ideas. This requires a patience, work and strategies for change for the better. To establish an excellent schools, Aga Khan Academies have sought, wherever possible, to create a dynamic environment with cultural, sports, and moral activities. The *pioneer* Aga Khan put all the means to bring technology and laboratory in a challenging environment of point of view geographical and cultural in Africa and Asia. Aga Khan foundation support this noble work with donation, conferences, and collaboration. The *headman* Aga Khan thinks that many problems can solved by science and education, especially health. Safe childbirth and sample diseases may lead to loss of life. The call of duty leads the *chief* Aga Khan to collaborate with governments to ameliorate a health state. For example, a staff of surgeons and doctors are sent to Afghanistan for the improvement of nutrition and reduction of some diseases for mothers and children. Researchers and scientists take advantage of this excellent regime. Aga Khan University Medical College has a high quality program of master and PhD for residency training. Research at the Medical College encompasses many specialties that affects real life problems such as diarrhea and tuberculosis. This fruit of the practice and research have created an atmosphere of extraordinary work in countries that experienced difficult political conditions. Really, his *highness* is a man who loves a challenge. Culture and civilization has a part of his human project which have a thorough goals. The Aga Khan Trust for Culture (3) is an example of a beacon to improve the welfare and prospects of people in countries. The *ringleader* Aga Khan is not limited to, his team, which includes the board of directors, board of trustee, collaborators, but his vision affects the professionalism. His *highness* encourages the young not educate to educate, but educate to create. For that purpose, The Aga Khan Award for Architecture (4) remains an example to promote the mentality of work to students.

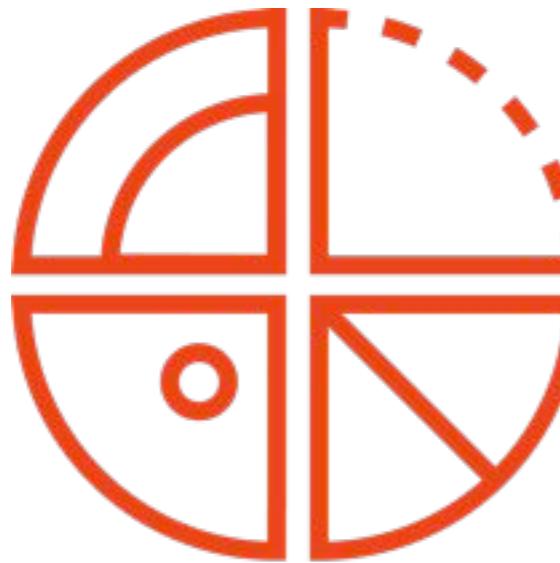
To conclude, Aga Khan's vision has many dimensions that formed a leadership in looking for a better world. His message to humanity is clear: *how can build bridges between nations with knowledge?* His legacy will remain vivid in the pantheon of history.

SOME REFERENCES OF AGA KHAN

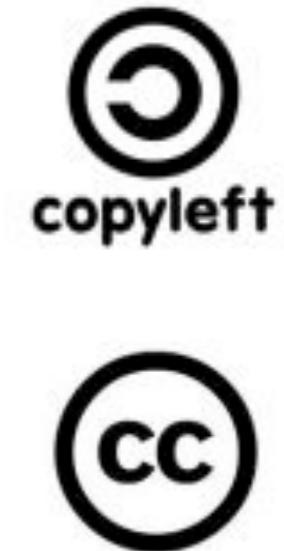
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