

Biodiversity and Poverty Reduction Strategies (PPR) in Latin America and the Caribbean. Recent Approaches and Criteria for Development Cooperation

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However Biodiversity is recognized as crucial for environmental health and the well-being of people, the loss of endemic species, and the destruction of ecological and vulnerable areas have been notably increased in the last decade. Recent research indicate that additional and sound efforts together with law enforcement have to be made to really implement international agreements and ecological conservation, protection and recuperation such the Convention on Biological Diversity (CBD, 2010). Some experiences stress “mainstreaming biodiversity” and “biological corridors” as innovated and successful approaches. The article wants to show some tangible effects on linking issues such as poverty, biodiversity conservation and protection and sustainable use from transition and poorer countries in Latin America and the Caribbean. These new scenarios imply changes for the development cooperation relying on a “realistic assessment” ex ante of socio-economic goals such as increasing production, food security and income or education improvement, and ownership of all interventions, as well as a better “face-to-face” cooperation between regional and national institutions and an empowered participation of local groups and actors. The final goal is to conclude with some criteria for agreements on development cooperation regarding public-private-civic partnership, participation, collaboration and control, poverty reduction strategies through biodiversity conservation and means of gender equity.

Keywords: Biodiversity, poverty reduction, lively hood, development cooperation.

Apesar de acuerdos internacionales y programas nacionales de conservación y protección se manifiesta en todo el mundo una reducción cada vez mayor de la diversidad biológica. Para revertir este proceso se requiere aparte de una aplicación drástica de los requisitos legales, esfuerzos adicionales. Bajo las denominaciones “integrando biodiversidad” y “corredores biológicos” ejemplos de América Latina y El Caribe muestran modelos innovadoras combinando la construcción y protección de la biodiversidad con la lucha contra la pobreza y el fortalecimiento de los derechos civiles, todo aquello en línea con la aplicación del Convenio sobre la Diversidad Biológica (CDB) de 1992. ¿Qué consecuencias implican estas nuevas políticas para el desarrollo de la cooperación? Este artículo se basa en experiencias del autor como coordinador de proyectos en el campo de la biodiversidad y lucha contra la pobreza en ALC durante los años 2012-2014 y trata tanto de analizar casos concretos, como de entregar sugerencias y desarrollar criterios para un anclaje de la biodiversidad en las políticas y proyectos de desarrollo, tanto en economías pobres como emergentes.

Palabras clave: Biodiversidad, reducción de pobreza, fundamentos de la existencia, cooperación al desarrollo.

Introduction

Despite international agreements and national environmental programs biological diversity is worldwide decreasing. Sound efforts are needed to reverse this process, in addition to a drastic implementation of legal requirements. Under the heading of “mainstreaming of biodiversity” and “bio-corridors” examples from Latin America and the Caribbean (LAC) indicate innovative policy models and project planning for building and protecting biodiversity and combatting poverty and strengthening of civil rights; this efforts can be interpreted in line with the implementation of

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the Convention on Biological Diversity (CBD) from 1992. What kind of consequences do these policies bring for the development cooperation?

The present article is based on the author's experience as a project coordinator in the field of biodiversity in the LAC region between 2012 and 2014 and seeks to give both concrete suggestions as to develop criteria for anchoring biodiversity in policies and development programmes in poorer and transition countries.

The common sense: Biodiversity, much more than a measurable value

Biodiversity is a crucial factor for the well-being of people. A high degree of biodiversity guarantees sustainable environmental services and goods, essential for all our human needs. Environmental goods form the backbone of local markets and sometimes of national economies. The loss of biodiversity by destruction of ecosystems affect, among other things, the amount of available food, accelerates climate change, increases the likelihood of extreme weather events with aperiodic consequences such as droughts and floods; but most of all, does steady loss of flora and fauna increase poverty, rural poverty, populations with a high potential of suffering diseases and large areas being affected by depopulation. Particularly those population groups who highly depend on healthy ecosystems and their services are mostly affected by the destruction of a biological equilibrium (Gentes, 2013a; see Photo No.1).

1. This strategy covers 6 thematic areas: (i) implementation of the Directive 92/43 / EEC (Fauna-Flora-Habitats Directive) from 1992; (ii) conservation and upgrading of ecosystems; (iii) conservation and upgrading of agricultural and forestry ecosystems; (iv) ensuring sustainable use of fish stocks; (v) identification and controlling spread of invasive species, and (vi) stop global loss of biodiversity.

2. The most remarkable of the 20 targets are hereby: at least halving the loss - if possible, no further loss -of natural habitats, including forests; conservation of 17% of terrestrial and inland water areas and 10% of marine and coastal areas; conservation and restoration activities in at least 15% of degraded areas; special efforts for endangered coral reefs.

Can the loss of biodiversity be still be stopped, and if so, how?

The United Nations Decade of Biodiversity is running from 2011-2020, the European Commission published on May 2011 its own Biodiversity Strategy, focussing on sound measures to stop the loss of biodiversity by 2020 (European Commission, 2011).¹

However, the Global Biodiversity Outlook 4 from the United Nations of 2014, includes data from nearly 200 countries and considered a reality check for Biological Diversity, paints a bleak picture of the so-called 20 Aichi targets for Convention on Biological Diversity agreed in 2010 by 150 governments (CBD, 2010)²: Thus the loss of biodiversity -especially on wild plants and wildlife



Photo No. 1. Santiago de Cuba, 2012.



as such, ecosystems, ocean pollution and over-fishing, and a still high rate of deforestation of the forests— are almost impossible to be compensated in the future, and global goals can only be achieved through a drastic implementation of legal regulations and additional policies and programs by 2020 (Secretariat of the Convention on Biological Diversity, 2014).

In October 2014 a major report launched by the World Wildlife Fund (WWF, 2014) evoked consternation worldwide: thus half of the wildlife populations that originally lived on earth have become extinct in the past four decades; this negative trend will last if human kind do not act, according to the WWF. WWF's Living Planet Index (LPI), a representative method for measuring global biodiversity, shows that between 1970-2010 more than 10,000 mammals - birds, reptiles, amphibians and fish - have been extinguished; a “historical” loss by 52%; a much larger decline than expected so far.

The results of the WWF demonstrate consistencies with a scenario that scientists released the same month in Science Journal (Tittensor et al., 2014): Taking for granted the current pace and style of a “reaction-action-policy” and “crisis management” for biodiversity it seems unlike to reverse the negative trend by 2020, according to the researchers. Claims for additional political and social efforts relying on the Convention on Biological Diversity (1992) came up in the study research. According to Tittensor et al. (2014) findings—applying 55 biodiversity indicators- nearly all of the Aichi targets for 2020 -including the comprehensive protection, protection of biodiversity, reversing the negative land use trends and special protections for endangered species— indicate either regression or an arrested development.

3. Steiner, A. 2014. Keynote Opening of the 12th Meeting of the Conference of the Parties to the Convention on Biological Diversity.

4. “... a process of embedding biodiversity considerations into policies, strategies and practices of key public and private actors that impact or rely on biodiversity, so that it is conserved and sustainably and equitably used both locally and globally” (Huntley, 2014: 4).

In the final declaration of the CBD Conference of 17 October 2014 in Pyeongchang/ South Korea government officials detained again, to set national strategies and local actions for biodiversity protection and expansion as policy guidelines and, compared to the current situation, to double the current financial and institutional efforts (UNDP, 2014a). Failing to act, as the UNEP Secretary General Achim Steiner stated, could not only lead to significant losses of biodiversity but also to decreasing of national economies, estimated at 14 billion US dollars by the year 2050th.³

Again in this occasion, the recognition and promotion of indigenous knowledge was underlined, and cemented as property rights in the Convention on Biological Diversity. Specifically the CBD recognizes that “...biodiversity and traditional knowledge are especially important for sustainable livelihoods, particularly for indigenous and local communities as well as poor and vulnerable groups” (UNDP, 2014b: 3). The involvement of the private sector, in particular the promotion of alliances and alliances with local and regional governments, as well as a more effective inclusion of gender aspects, should be paid special attention in the national implementation strategies.

“Biodiversity Mainstreaming”: New recipes and contours

Voices from Global South countries with high endemism echo a “mainstreaming of biodiversity” might be an effective tool in the fight against poverty and environmental degradation, while creating synergies between applied science, sustainable development planning and participative implementation. According to Huntley (2014), “biodiversity mainstreaming” can be conceived as a process of embedding biodiversity in policies, strategies and practices, aiming on environmental protection and a sustainable and equitable local and global use among the major public and private actors whose actions have negative impacts on biodiversity or depend on biodiversity services.⁴ In the final declaration of Pyeongchang “mainstreaming of biodiversity” has been



highlighted (UNDP, 2014b: 2). Countries like South Africa and Costa Rica are assumed here to have a model character. Why that?

Firstly, both countries established meaningful democratic and transparent governance structures, ensuring legal certainties and sustainable permanence of the intervention, so granted investments could be channelled; secondly, the high degree of biodiversity under a simultaneous high pressure for extraction of natural resources in both countries –for example, through deforestation, land use changes, plantations of exotic species and over-exploitation of endemic species- has led, instead to further losses of biodiversity, to political awareness and social consciousness and a greater international interest and cash flows, by whom state-controlled compensation system were built and new sources of funding were gained; third, both countries can regard achievements in the applied and strong “education-oriented” Environmental Sciences.

This public education policies more than two decades ago were combined with special programs for combating poverty through improved general education -including the creation of professionals in sustainable resource protection and in the protected areas; and fourthly, Costa Rica and South Africa benefited considerably from the power of an “educated elite” who recognized and disseminated the overcoming boundaries between science, education and politics: under the lead of Environment Ministers -Valli Moosa of South Africa and Carlos Rodriguez in Costa Rica- both countries achieved a “mainstreaming biodiversity” into government policies and civil society (Huntley, 2014).

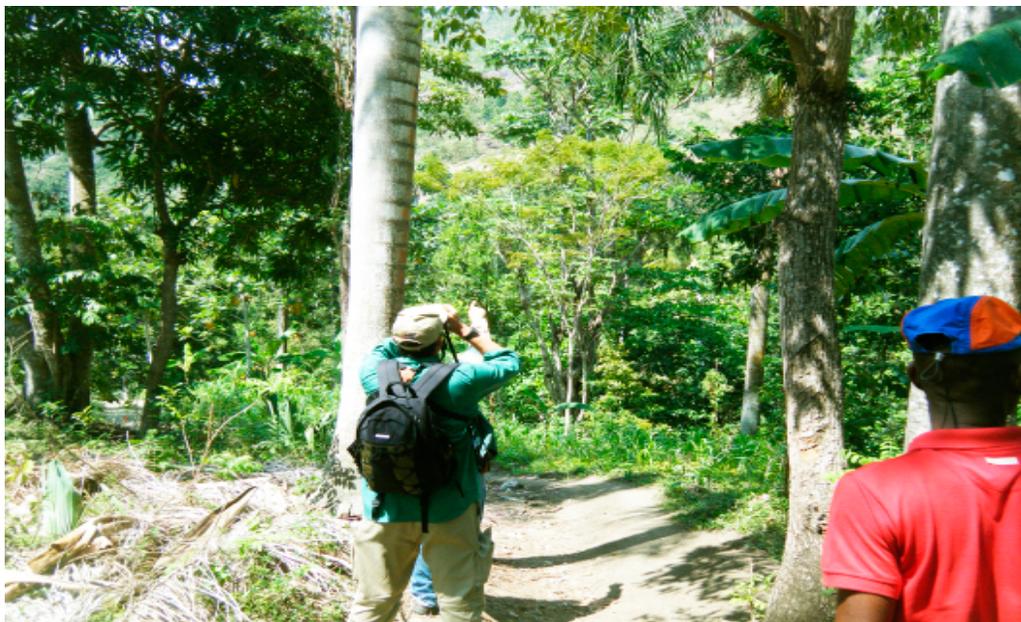


Photo No. 2. Bassin Bleu, Haiti. 2013.

Bio-corridors: Poverty Reduction through Ecological Livelihoods and Spatial Use

Also poorer countries attempt in recent years new approaches protecting biodiversity pursues. Recent government agreements from Caribbean countries, such as Cuba, Haiti and the Dominican Republic, set on the development and expansion of “biological corridors” as a country-border cooperation among national initiatives for environmental and landscape ecology (EU/UNEP/UNDP, 2009). “Biological corridors”, or just Bio-corridors, can be defined as a continuous geographical extension of the habitat and ecosystems linked in itself, which may be either physically or functionally. A connection or connectivity between habitats that have been fragmented by natural hazards or human development, can either be restored or, in the opposite case, be preserved.

Bio-corridors are considered an important action towards conservation of biodiversity, and to restore natural habitats. A restoration of habitats supports biodiversity and entails





Photo No. 3. Bahoruco, Dominican Republic and Haiti border area, 2013.

flora and fauna a spatial chance to exist. Conservation organizations are to identify areas that are important for connectivity, thereby educate the public about procedures and develop strategies to include them in the creation and protective measures for natural habitats (Boyle & Ervin, 2010; Photo No. 2).

The situation for people and the environment in the smaller Caribbean countries is dramatic, as a brief look at Haiti shows: the country has a per capita income of 6,731 US\$ scaling at position 158 of United Nations Human Development Index (HDI). 72% of now nearly 10 million Haitians - half of whom are under 20 years old - live on less than 1US dollar per day. Child mortality of children under 5 years relies on 20% per thousand inhabitants; nearly half of the population (48.7%) is considered to be illiterate; according to unofficial data the unemployment rate is 27% of the population, however, two-thirds of Haitians are underemployed.

Fragility of the State, insufficient technical and administrative and human capacity at all levels, lack of fiscalization and controls also accelerate environmental deterioration resulting thus in an alarming loss of biodiversity and natural

resources, especially forest and soil; soil erosion and desertification is rapidly increasing, according to a report of the United Nations, to (UNEP/UNDP, 2013). More than 90% of Haitian households in rural areas use daily wood or charcoal for cooking. It is estimated that yearly more than 50 million trees are cut down.

In 2011, a total of 72% energy consumption was accounted to the consumption of wood; the situation is even more pronounced in rural areas and in low-income households. The charcoal business is booming, according to data available from development agencies, mainly due to lack of sustainable energy alternatives, enforced control

and sanction mechanisms -and at the expense of neighboring protected areas - such as the Sierra de Bahoruco- in the Dominican Republic. Bribes to military and border officials allow illegal logging, processing and transportation by organized gangs to the in neighbouring Haiti (Helvetas, 2009. See Photo No. 3).

According to the Critical Ecosystem Partnership Fund (CEPF, 2010) with 27,750 square kilometres extension Haiti is among the countries mostly are affected by the world's loss of species. Although only 3% of the original forest cover remain since the state was founded (1804)

Photo No. 4. National Park *Forêt des Pins*, Haiti 2012.

and today almost all 30 watersheds have been deforested, the native fauna still includes more than 2,000 species, the native flora more than 5,000 species, 36% of them considered endemic. In 2010 the CEPF identified in Haiti 17 of the 290 world's known biodiverse areas. However, increasing poverty and population growth as well as strong overexploitation of natural resources threaten this biodiversity increasingly (See Photo No. 4).

The initiative “Caribbean Bio-Corridor” (CBC)⁵ aims to support national projects for the management of protected areas in a long term strategy and integrate them into a regional approach, and as such aiming to contribute concretely to the preservation of global biodiversity especially in the protected areas, including those of Haiti (UNEP et al., 2009, Figure No. 1).

The CBC initiative goes back to an intergovernmental agreement on the Ministers of the Environment from Cuba, Haiti and the Dominican Republic and is been supported and co-funded in the first phase (2009 to June 2013) by the European Union (EU), the United Nations Environment Programme (UNEP) and the United Nations Program for Development (UNDP) (EU/UNEP/UNDP, 2009). The CBC provides the participating countries a framework for creating synergies in the protected areas and newly identified zones for biodiversity conservation and restoration. The cooperation between the countries focusses on four primary goals: (i) environmental remediation; (ii) development of alternative livelihoods, (iii) poverty reduction, through the reduction of pressure on biological resources, and (iv) a dissemination

5. This program had in its first phase (June 2010-June 2014) a volume of 10,705,269 euros, proportionally distributed as following: EU (2,774,835 euros); UNEP (100,000 euros); Dominican Republic (3,381,251 euros), of which the Global Environmental Fund (GEF) funds (3,055,164 euros) and own funds of the government (326,087 EUR); Haiti (2,977,190 euros), all GEF funds and Cuba (1,471,993 euros), of which GEF funds (811,773 euros) and Mac Arthur Foundation (660, 220 euros).



Fig. 1: National Parks in Haiti (in black) and the most important areas of biodiversity . The red framed areas are the project areas of the Caribbean Bio Corridors (CBC). Based on data from <http://www.cbcpnuma.org/es> , March 11, 2015th

of efficient and sustainable energy use systems, mainly from Cuba (including efficient stoves, biogas plants and biogas stoves, solar lamps and solar cells).

An important social aspect is creating awareness at the municipality level for the sustainable implementation and institutional and technical consulting process (South-South) in the construction of spatial zones for biodiversity conservation starting on Cubas' leading experience in this area. An active network of regional and international non-governmental organizations (INGO) - including the private German Foundation Welthungerhilfe - together with regional units of the Environment Ministries and the CBC team develop and carry out diverse projects in the priority areas defined before.

Although the final evaluation is still pending, intern project reports such as on last Haitian world heritage in Bassin Bleu demonstrate that the interventions rely on local interests - such as on tourism promotion or sustainable agriculture – generating a broad involvement and a high degree of ownership and participation, especially of young people and local committees of the water and sanitation supply (<http://www.cbcpnuma.org/es>, March, 11st , 2015; Gentes, 2013a, b; Photo No. 5).





Photo No. 5. The waterfalls of Bassin Bleu in the southwest of Haiti - since 2012 a World Heritage Site by UNESCO, Haiti 2013.

Convention on Biological Diversity and legal implementation in an emerging country: The Mexican Case

Representatives of emerging countries such as Mexico, host country of the next and thus 13th Conference of the Parties of the CBD convention in 2015, underlined the importance of biodiversity as a priority theme for action of the PRI government of President Enrique Peña Nieto. Emphasis rely here on a linkage between those actions for conservation and poverty-reducing measures that expand protected areas and create sustainable benefits - probably in addition to the fight against drug cartels, one of the two key themes of the current Mexican government. Hereby, the Ministry of Environment and Natural Resources (Secretaría de Medio Ambiente y Recursos Naturales, SEMARNAT) stressed out progress in the development of municipal environmental authorities (Unidades de Manejo y para la Conservación de la Vida aprovechamiento Sustentable Silvestre, UMA). According to studies of the SEMARNAT and

the National Wildlife Refuge Commission (Comisión Nacional de Areas Naturales Protegidas, CONANP), the UMA contribute significantly to improving the living standards of people in the nature reserves. Mexico, as a mega diverse country, stepped the Protocol of Nagoya in October 2014.

The government considers international donors and additional funds to support the ejidos and indigenous communities along the buffer zones and inside the national-public protected areas. An ejido can be understood as a kind of territorial management system in which the land belongs to a group of families and is submitted to two types of jurisdiction: (i) an individual user right to usufruct and production

by family members; (ii) a collective access user right for all members of the community; these latter provisions mostly underlie local orders and regulations of municipalities. According to the Agricultural Act of 1992 the owners or ejidatarios have the right to rent and sale of their lands. However, the purchase of common property, however, is prohibited by national law. Recent qualitative research shows that many actions of local governments in protected areas with ejidos are often disguised as compensation payments for environmental services (PES), but include ultimately illegal expropriation or bribes of ejidatarios to accelerate speculatively the construction of infrastructure and urbanization (Gentes & Jost, 2015).

The loss of biodiversity, according to recent estimations of the National Commission for Knowledge and Benefits on Biodiversity (Comisión Nacional para el Uso de la Biodiversidad y Conocimiento, CONABIO) since the state was founded (1821) has been accelerated rapidly: about half of the natural ecosystems, especially rain, dry and cloud forests and mangroves - have been destroyed (SEMARNAT 2009). A loss of habitats due to "changes in land use" and overexploitation and illegal extraction of natural resources, such as oil, natural gas, water, wood. While environmental as-



assessments for all extractive and environmentally-using activities are legally binding since the 90s, and State is obliged to sanction negative impact on the ecological balance or to require a regeneration of the affected areas, regulation and standards fail in practice, both social acceptance and legal enforcement is required, the judicial lacks courage to scope with precedent cases regarding illegal activities of national and transnational corporations.

The implementation of sanctions and incentives at state level is an urgent matter of the reformed Mexican environmental legislation of 2014 (see Cámara de Diputados del Honorable Congreso de la Unión, 1988). The legal framework has quite some time: Since 2008, the Mexican government has a benchmark study on Biological Diversity at hand (SEMARNAT, 2008). In 1993 Government had already developed a country survey and designed a National Biodiversity Strategy. In the strategy from 2000 public policy addresses the protection and preservation, the valuation of biodiversity, the knowledge and information management, as well as the diversification of land use (CONABIO, 2000). This strategy was the result of a collaborative project between CONABIO, SEMARNAT, the private and NGO sector and an active support of state universities (including mainly the Universidad Nacional Autónoma de México, UNAM) and enclosed a broad consultation process. Several federal districts - Morelos since 2003, Mexico DF



Photo No. 6. UNAM. Tulum, Mexico, 2013.

since 2009 - have their own regional analyses and strategies for biodiversity protection (CEAMA-CONABIO, 2003; Gobierno del Estado de México, 2009).

The next imminent step should be the development of a National Action Plan. But often government documents endure more promises than they could meet, and especially after the Zapatista uprising in Chiapas in January 1994, calls for powerful and independent institutions do not quiet, due to state and government failures to meet accountability and integrity. In fact, only operating and self-governing ejidos do put into practice and deeds promises of government and principles of legislation (Photo. No. 6).⁶

Mega-Biodiversity and the German Development Cooperation

In Pyeongchang CONANP referred less to the problems stated in biodiversity conservation, but rather on positive results of a joint venture and pilot project together with the German Society for International Cooperation (GIZ) on economic valorisation of ecosystems in protected areas (GIZ, 2012).

6. The National Human Rights Commission (Comisión Nacional de Derechos Humanos) built in 1992 seems unable to fulfil this task, because of political influence and governmental core funding. Rather, the work and hearings from the Permanent Peoples' Tribunal (Tribunal Permanente de los Pueblos, TPP) in the case of Mexico, imply a politically effective counterweight. The TPP - going back to the UN Declaration of Human Rights from 1979 - is an international and interdisciplinary ethical judgment of non-governmental nature, with around 130 members of recognized moral authority from different countries, disciplines and ideological horizons which examine the causes of the violation of fundamental human rights - including environmental rights -, and demands government and international bodies, taking coercive actions (see <http://www.tppmexico.org/>, March, 11st, 2015).



The individual measure falls under the increased involvement of the German federal government in the environmental sector in Mexico. The project is looking for a co-ordinated co-operation of federal and state authorities of the environmental sector, including strengthening competences of authorities involved in human resources and organizational level through an organizational development, and knowledge management on protected areas and biodiversity through an information portal at the CONANP and the development of concrete projects aiming to increase production, food security and to create enhanced incomes for marginal populations. The Mexican side hopes that, so CONANP, an efficient method of valorisation of environmental services and protection and development of terrestrial ecosystems through concrete support for the population in the concerned regions.⁷

In order to achieve this multifactorial goals an additional law degree was introduced within the Environmental Management Act, which recognizes collective-communitarian land management - whether under ejidos, indigenous lands or smallholder families ownership – as “voluntary assigned protected areas” (áreas destinadas voluntariamente a la conservación). Until the end of 2014 were able to more than 400,000 hectares of newly protected areas were acquired. From the public perspective of CONANP an effective measure in the preservation of Mexico’s natural resources. Projects aiming to create, implement and participatory assess innovative pilot projects in the states and districts with high levels of biodiversity – causing a simultaneous reduction of rural poverty are yet scaled out weakly.

In 2014 the GIZ launched a project facing the design and implementation of gender-specific measures for

7. Particularly notably lasting effects are shown up by projects in the following areas: (i) optimization and use of agricultural biodiversity, water and soil; (ii) access and benefit sharing of environmental services; (iii) local actions to adapt to climate change, and (iv) linking traditional knowledge with new knowledge and innovative approaches on valorisation and sustainable use of natural resources.

biodiversity conservation and sustainable use of natural resources in the Eje Neovolcánico. This project targets funding of federal and state authorities, aiming to ensure the preservation of biodiversity in the existing protected areas and beyond, as well as to promote and improve their connectivity and to maintain their ecosystem services (GIZ, 2014). All agreements pursuant to the Convention on Biological Diversity (CBD, 2010) and the Mexican development plan of 2013-2018, which emphasize on obtaining on the natural heritage and the management of natural resources and green technologies, resulting in an increase of sustainable productivity and poverty reduction as strategic goals.

Strategic aspects for cooperation

Especially for the Global South, but also increasingly in cooperation with the Global North scenarios emerge for development cooperation action on the axes of partially cross-country poverty reduction programmes through biodiversity conservation and sustainable and environmentally harmless use. It should be mentioned that anchor countries, such as Mexico, are still so-called emerging economies; countries on the road to the “first” world – arrival still vague. Measures for biodiversity with a poverty-reducing social and economic output are therefore “corrective measures” and has to be combined with education policies, effective action for fiscalization and a preventive fight against corruption and violence: more than 50 million Mexicans, about 45% of the population still live below the poverty line, nearly 10% of the population suffers extreme poverty, the number of unsolved cases of disappeared and murdered Mexicans since the Calderon government (2006-2010) setting war against the drug cartels rises up to tens of thousands. Issues of environmental protection have to be measured regarding a still low will to improve social and economic cohesion, as well as to enforce state and local regulations and control.

By signing the Convention on Biological Diversity of 1992, 176 nations committed to maintain and to utilize sustainably their biodiverse resources, and to guarantee a fair



and equitable sharing of benefits arising from the utilization of genetic resources. International and bilateral co-operation projects should necessarily rely on a “realistic assessment” ex ante socio-economic objectives such as increasing production, food security and income or education improvement, build through biodiversity conservation. In addition, there is an urgent need to build links and complied with “specific arrangements” between federal, state and communitarian authorities in biodiversity conservation and protected areas.

More concerted and coordinated, thereby also more coherent policies, strategies, projects in addition to programs of fiscalization and anti-corruption between authorities at federal state and communitarian and non-state actor levels could lead to a more integrate valorization of biodiversity and thus legitimate development as such and orientation of precaution measure. In terms of sustainability, activities need to be embedded and coordinated with local, regional and national actors in order to increase inclusion, delegation and ownership. Cooperation, based on mutual trust, allows to replicate and to transfer knowledge to other project regions, inclusive neighbouring countries. The key indicator for a successful partnership should be a structural and long-term and qualitative decrease of poverty due to sustainable use and expansion of biodiversity.

Criteria and recommendations for biodiversity development

Public-private and civil alliances: referred here as a contractual collaboration between the public sector, private enterprises and municipalities and communities in a “complementary partnership of convenience” in the fields of poverty reduction through biodiversity conservation. The aim of the “labour agreement”: The private partner assumes responsibility for the efficient production of services, always where the state is limited in its means, the public sector, however, contributes to ensure that general interest and (contractual) legal arrangements are being respected,

while local groups and associations are co-committed to controlling, monitoring and knowledge processing. The introduction of these mandatory partnership includes an ex post evaluation by independent organizations, if possible academic institutions which should be aligned from the beginning to the dissemination of lessons learnt and a possible replication in other projects and regions.

Participation, power delegation and control: should not only be understood as inclusion of individuals and organizations (stakeholders) in decision-making processes but also as inclusion of women, men, children and adolescents and older in all reliable negotiation questions and decision-making processes. Ejidos in Mexico, as well as local protection authorities in Costa Rica linked to applied science indicate: participation in the field of biodiversity and resource protection should be strengthened especially through the empowerment and training of local controllers, trainers and park rangers in biological diversity; educational and legal claims against the state are receiving relevance, and the “social and communitarian capital” regarding confidence and local capacities of conflict management are ultimately been enhanced (Bourdieu & Wacquaint, 1992).

Poverty Reduction through biodiversity conservation and social justice: poverty as a state of extreme social disadvantage is a consequence of environmental destruction and non-recognition and disrespect of individual and collective rights due to global hegemonic interests, arising from (trans)national corporations or lobby from own national elites and oligarchies. Project intervention should build awareness on power asymmetries and social exclusion in situ be, and start designing with a mapping of stakeholders and approaches towards interests and concerns of marginalized and excluded communities and population groups and a preliminary strategy on how to overcome their poverty and powerlessness. As the example of Haiti shows, on the one hand public-entrepreneurship and largely neglected segments of the population should receive incentives for change, especially in experimenting with value chains. Secondly, customary rules and conventions



should be strengthened and adapted to help state to adapt regulations in terms of a “socio-legal inclusion” and in terms of concrete improvements of (a pluralistic) legality by legitimacy in order of concrete assumption of responsibility of actors involved in biodiversity.

Gender and Social Equity as Generational Rights: this should likely be understood as both gender equality (“men and women are equal”) as well as equality of generations (“all generations have the same rights”) understood. The underlying comprehension is that increasing levels of education and additional formal and informal further education and training - inter alia biodiversity and natural resources – lead to decreasing gender differentiation and discrimination. On this mutual understanding strong practical oriented development projects can be designed and internal conflict regulation mechanisms of permanent communities can be enhanced.

Development and diffusion of renewable energy: joint programs using different energy sources and- mechanisms should not exempt State from its general obligation to supply and to search for portable energy alternatives. Rather social and communitarian actions of communities and groups should thereby be increased and the transition towards widespread expansion and benefits form resource-friendly energy sources being supported.

Law Enforcement: The Convention on Biological Diversity of 1992 and all other binding rules and agreements need national and international traceable and verifiable indicators and means of verification, regular independent evaluations and the establishment and strengthening of national and communitarian supervisory bodies. Cases of deliberate destruction of the environment must be displayed, followed by independent courts and governmental neutral instances and responsible must be punished.



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Illustrations

PHOTO 1: Oyster farm operated by local cooperatives in the mangrove creeks of the Caribbean Bio-Corridor, Santiago de Cuba 2012.

PHOTO 2: Caribbean Bio-Corridor (CBC), Cuban biologists in capacity building course for future Haitian park wardens, Bassin Bleu, Haiti. 2013.

PHOTO 3: Illegal charcoal production and plunder from conservation areas, Bahoruco, Dominican Republic and Haiti border area, 2013.

PHOTO 4: Last Agave and Caribbean Pine Forests, National Park Forêt des Pins, Haiti 2012.

PHOTO 5: The waterfalls of Bassin Bleu in the southwest of Haiti - since 2012 a World Heritage Site by UNESCO, Haiti 2013.

PHOTO 6: Ornithologists of the UNAM (Mexico) during the exploration and classification of endemic species, Tulum, Mexico, 2013.

FIGURE 1: National Parks in Haiti (in black) and most important areas of biodiversity. The red framed areas belong to the project areas of the Caribbean Bio-Corridors (CBC); based on data from <http://www.cbcnuma.org/es>, March 11, 2015.

