

## **AICHI BIODIVERSITY TARGET 7: SUSTAINABLE AGRICULTURE, AQUACULTURE AND FORESTRY**

**ABT 7 – sustainable resource management – focuses on sustainable agriculture, aquaculture and forestry.**

Irrational and unsustainable utilization of resources constitute a great challenge to the attainment of both the ABT 7 and the goals set by the United Nations (SDGs). Thus, the Gambia cannot stand out of this regard despite the rate of biodiversity erosion triggered by unsustainable practices bound to agriculture, and forestry. These practices are observed as major factors that weaken the national efforts to conserve the integrity of the whole constituents of ecosystems which consequently requires a paradigm shift. Otherwise, there is a need to ponder over sustainable transition that can concomitantly guarantee the sustainable management of 50% of areas under agriculture, aquaculture and forestry and preserve biodiversity. In response to this ambition, the government did not contempt to a mere enforcement of environmental laws and regulations but further attempted to formulate realistic and integrated policies and programs such as Program for Accelerated Growth and Employment (PAGE), The Vision 2020 which promote development through sustainable management of natural resources.

**Target 7: by 2020, 50% of areas under agriculture, aquaculture, and forestry are managed sustainably, ensuring conservation of biodiversity**

### Achieving ABT 7: key challenges

The Gambia is one of the most challenged countries in West Africa in terms of biodiversity conservation based on a sustainable management of agricultural, aquaculture and forestry areas. The challenges in meeting this target are obviously multi-faceted and are manifested in different forms ranging from natural to anthropogenic factors.

#### ➤ Frequent bush fire

The decrease in the forest cover has been attributable to frequent bushfire incidence which is experienced by 79 percent of the population at least once or more times per year and they occur mainly during the dry season and at the rural areas.<sup>1</sup>

According to a study conducted by FAO, WWF (2013) fires burn an average of about 60% of the country's vegetation cover. Some of the Regions such as The Lower River Region (LRR) has the highest incidence of fires with an average of about 80%, while Central River Region (CRR) and West

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<sup>1</sup> National report (2012)

Coast Region (WCR) has the lowest incidence of fires of about 46% mainly due to the effect of community participation<sup>2</sup>.

The early-dry-season control burning method of fire hotspots for example proves to be successful in these last years. One of the results of constant fires in forest ecosystems is a change in tree species composition to assemblages which are more fire tolerant. This change in tree species is changing the habitat and driving dependent wild animals to almost extinction.

➤ Inadequate policy frameworks and jurisdictional gaps and overlaps

Policy frameworks are acutely displayed as one of the greatest challenges that systematically impede the achievement of ABT7 at the national scale. They are often translated by the lack of proper adequacy between development objectives and the biodiversity management frameworks, yet the government should run development programs and enact laws that directly or systematically mainstream the values of natural living resources. Nevertheless, in diverse cases, it has been remarked that the governmental jurisdiction completely fails to reflect the spectrum of actual conservation needs. For instance national laws, regulations or program agency to guarantee the protection and management of a specific species or ecosystems does not exist and this therefore, refers to *jurisdictional gap*. Or even if they exist, they will be found in different version within different agencies leading to *jurisdictional overlapping conflicts*. Jurisdictional overlaps hamper prospects related to the protection and sustainable use of natural resources in the Gambia. The most perfect illustration persists between Forestry and Wildlife Agencies that claim jurisdiction or management over forest ecosystems. In the context of land use, these above-mentioned challenges can be observed between Agricultural agencies and Forestry.

➤ Unsustainable use and consumption of forest resources

Illegal and/or unsustainable logging in The Gambia contributes progressively to the degradation of a large spectrum of forests. In fact, it has been estimated that up to 99% of traded rosewood from Gambia might originate from illegal sources. Moreover, consumption of forest beverages and some wild food (e.g. Locust beans and baobab) are on the increase with large and reliable markets, and the products tend to be supplied by specialized producers using more intensive production systems. These challenges seriously undermine national efforts to improve sustainable forest management in the country. According to the Forestry National Action Plan, the Gambia exports of rosewood increased from 0 m<sup>3</sup> to 317,466 m<sup>3</sup> valued at us\$165,598,644<sup>3</sup>. Records estimates suggest that up to 98% of the traded *pterocarpus erinaceus* (“keno”) might originate from illegal sources from 2010-2013 and this can be seen as a result of a systematic weak management system including a poor system of control.

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<sup>2</sup> Sillah, J. (2013) *Fire Management in The Gambia for the Fouta Djallon Watershed Management Project*. FAO

<sup>3</sup> By Salif babaucarr Gueye (March 2014). The Gambia's Exports of Rosewood, Forest Trends, Ministry of Environment and sustainable development

## ➤ Climate change

In recent years, climate variability in the Gambia has resulted in an increase in the frequency and severity of extreme weather-related events: droughts, floods, windstorm, rising temperatures, etc. These extreme events are expected to become severe under conditions of climate change as a result of woodland degradation and land-use change for both agricultural and aquaculture.

These extreme weather events drive the country into a deep vulnerable position because of factors such as recurrent droughts, floods, inequitable land distribution, overdependence on rain-fed agriculture and widespread poverty. Although there is much experience to date of coping with climate variability and disasters from which useful lessons for adaptation can be drawn, the projected pace of climate change could shorten the time frame available for adaptation to less than what the existing social and economic systems can cope with.

### Linkages to the un sustainable development goals

The sustainable management of agriculture, aquaculture and forestry is critical for achieving the SDG and is emphasized in multiple targets.

### **SDG 1: end poverty in all of its forms everywhere**

The government of the Gambia responded to SDG1 by reformulating ambitious and realistic national policies which are related to sustainable resource management focused on agriculture, aquaculture and forestry. For instance, the Program for Accelerated Growth and Employment (PAGE) ambitiously seeks to deliver a 10% of GDP growth while strongly accentuating on decent job creation and income generation, particularly in the productive sector of agriculture on which several communities depend on for their livelihoods. Moreover, the contribution of the vision 2020 is to be considered within this toolkit of poverty reduction policies alongside the National Adaptation plan that aims to reduce poverty rate through the reduction of climate impacts on the most vulnerable communities. Consistent with our National Development Plan (2018 to 2021), and National Forestry Strategy (2019 to 2028), the overall vision of this action plan is a secured country that upholds a stable Green Economy: ‘An existence of thriving forest ecosystem goods and services that fulfill ecological values, and provides economic and social benefits for society’.

### **SDG 2: end hunger, achieve food security and improve nutrition and promote sustainable agriculture**

The inconsiderable availability and diversity of natural resources in the Gambia leads the country into under development of the economy, food insecurity and mal-nutrition. As a matter of fact, 75% of the rural population yearly experiences a chronic food deficit for at least two months (July-august) despite the poor income diversity. Crop production is the predominant agricultural activity in the Gambia, followed by animal husbandry, rice farming and small scale vegetable gardener. Indeed,

91% of extremely poor households are dependent on agriculture whose practices are not inherent with sustainability's.

To address this issues and to get aligned with SDGs, the Gambia has integrated prospective programs and projects such as the vision 2020 which is an articulated document framework for blending a new generation of economic and social policies into a coherent set for accelerating growth and fighting poverty in a sustainable fashion while taking into consideration the environmental sustainability aspect. The Large-scale ecosystem-based adaptation in the Gambia: developing a climate-resilient, natural resource-based economy is currently one of the most promising projects that tally well with this goal.

### **SDG 7: ensure access to affordable, reliable, sustainable and modern energy for all**

An affordable, reliable and sustainable energy supply can facilitate the provision of safe water, increased agricultural productivity, the creation of local jobs and the functioning of educational and healthcare facilities. Access to a reliable energy supply is also recognized as a crucial milestone towards the achievement of the SDG.

In 2007 the Government adopted the Household Energy Strategy (HES) for the Gambia with the objectives of discouraging the on-going degradation of forest resources; and promoting the development of alternative and renewable energy resources. Currently the Government is implementing a new medium term energy policy, the National Energy Policy- The Gambia 2014-18, which provides a framework for the provision of an efficient, reliable and affordable energy supply to support the socio-economic development of the country. In the wider framework of Sustainable Energy for All (SE4ALL) Initiative, The Gambia remains committed to achieving the targets by the year 2030. In 2014, a number of project concept notes on improved cooking stoves and renewable energy were elaborated with potential investors.

### **SDG 8: promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

The most recent development plan document refers to the Program for Accelerated Growth and Employment (PAGE) which is the Gambia's development strategy and the broad policy considerations. This national program emphasis on the accelerating and sustaining economic growth by consolidating the macroeconomic framework, strengthening the main sources of economic growth, and increasing investment opportunities. The design includes a focus on interventions which allow for income generating activities which can create business opportunities for individuals, households and communities.

## **SDG 12: ensure sustainable consumption and production patterns**

A transition to a responsible consumption and production is observed as a prerequisite to the achievement of both SDG12 and the ABT 7. This logical framework is generally mirrored in the national programs and policies with a strong emphasis on the promotion of green economy. Indeed, the Gambia has practiced resource management techniques consistent with the conservationist and efficient resource utilization thrust of the green economy well before the formulation of the concept. Forest resource regeneration techniques such as the practice of extracting only dead wood for domestic use, the observance of closed fishing seasons and the designation of sanctuaries to protect spawning species from capture have been useful in 'greening' the forest and fisheries sector.

## **SDG 14: conserve and sustainably use the oceans, seas and marine resources for sustainable development**

The Gambia national fisheries policies are likely based on the principle of SDGs in liaison with the ABT7. The integrated coastal and marine biodiversity management project has been successful as a pilot initiative to protect threatened and endangered species in the coastal and marine environment. The project also established a community banking program to facilitate availability of credit and savings mobilization for villagers, which have boosted dormant economic activities. The project also has a water control and siltation prevention component in the protected area. A biodiversity monitoring system is in place. There is need to strengthen *in situ* conservation of globally significant species and habitats in the Gambia. Some of the significant achievements of the project include livelihood activities in beneficiary communities, expanded community participation in conservation and sustainable management of coastal and marine species

## **SDG 15: protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss**

Protection, restoration and promotion of sustainable use of terrestrial ecosystems are pre-conditions to sustainable development and require the active participation of rural communities. Forestry activities are interrelated with farming activities, including livestock husbandry, and therefore cannot be viewed in isolation. Furthermore, forestry planning and development has to be seen in the context of population growth and a corresponding increase in pressure for forest land and products. Equally important is the educational level of the population needed to recognize and understand these linkages, and the necessity to take basic steps aimed at restoring the balance.

Within the national context, the program for accelerate grown strive to build bridge between ecology and economy via the sustainable management of all types of ecosystems. Furthermore, the government of the Gambia recognizes the importance of forest resource management in view of the economic and environmental values of forest resources and the forest ecology.

## Assessing your national contribution to achieving ABT 7

While considering the recent national agricultural, forestry and aquaculture policies and program frameworks, it is evidential that the government of the Gambia has spared no effort to carry out activities in order to contribute to the achievement of ABT7. These endeavors are in some cases expressed by the adoption of community forest management approaches which allowed the establishment of 458 communities disposing a total area of 31,682.32 hectares (ha.) of natural forestland<sup>4</sup>. Generally, community forest management (CFM) approaches put the local communities at the top of the pyramid of sustainable management and utilization of forest resources and transfer to them legal ownership of both land and trees. This reform is one of the greatest successes in the decentralization policy mainly in resource management policy as it called the local communities and private sector to relevantly participate in forest management and sustainable utilization of forest-based products/services. Consequently, this policy reforms allowed in 2015, the Department of Forestry to develop in the context of its management plan, (29) Community Forests and jointly established (23) Joint Forest Park with the Department of Parks and wildlife. Currently there are (22) wildlife Protected Areas, occupying a total area of 76,064 hectares, approximately 6.4% of Gambia's total surface area. Only 0.16% of the terrestrial and inland water is protected while 7.4% of the marine and coastal areas are under formal protection. (8) Eight of these Protected Areas are reserves and national parks while 14 are community based conservation areas under the mandate of the Department of Parks and Wildlife (DPWM). There are 66 forest reserves covering a total of 34,029 hectares managed by the Department of Forestry. Thirty four forest parks totaling 22,239 hectares or 65% were designated as protected forest. Several local community forests also exist covering 18,000 hectares. However, In the context of law enforcement, 16 court cases on illegal activities had been reported in 2015 (bush fires and logging conducted). Program of Work on Protected Areas (PoWPA), Gambia Biodiversity Institutional Strengthening Project (GBMISP), were all designed to reverse the negative impacts of unsustainable resource management on biodiversity.

Besides, Agricultural land (hectares) in Gambia was reported at 615000 ha in 2012 with a rate of 1.04 in fertilizer consumption (kilograms per hectare of arable land) according to the World Bank collection of development indicators, compiled from officially recognized sources. Regarding the growing need in agriculture land and with the intention to sustainably manage this sector, the government geared towards the 'Greening' agriculture centered on soil fertility management as a principle strategy facilitated by a land use planning framework and a data base in the form of a geographic information system. Resource management techniques employed included shifts in cropping patterns, changes in farming systems, the introduction of site-specific varieties of crops and adoption of livestock production along crop production. The soil and water management unit of the department of agriculture provided demand driven support to farmers to increase production, reduce or reverse land degradation and implement an integrated watershed management strategy. Conservation techniques utilized to maximize water and soil fertility utilization included dikes to collect run-off water for agricultural production and the construction of water bounds to control soil

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<sup>4</sup> DEPARTMENT OF FORESTRY: Community Forestry in The Gambia

erosion and maintain soil moisture for crop use. The sustainable farm management program under the Gambia agricultural investment plan 2010-2015 is to further deepen this ‘greening’ of agricultural production through integrated soil fertility management techniques ranging from multiple tree-pure stand and farm boundary planting, crop residue and compost management, the use of in-organic fertilizer and adoption of organic fertilizers to soil conservation practices.

However, it would be judicious to notice that aquaculture sector is still embryonic in the Gambia but deemed to have huge growth potential. This sector is germanely governed by Fish Farmers Association for Sustainable Aquaculture supported by FAO. To magnify her contribution to the global fisheries program, the government of the Gambia placed at the core of its national fisheries strategy certification programs emanating from marine stewardship council and the rigorous enforcement of FAO codes of conduct for fisheries.

## BIBLIOGRAPHICAL REFERENCES

- 1- Consideration of funding proposals – Addendum Funding proposal package for FP011: Large-scale Ecosystem-based Adaptation in The Gambia: developing a climate-resilient, natural resource-based economy (2016)
- 2- DPWM. 2014. The Fifth National Report to the Convention on Biological Diversity. May 2014
- 3- Gambia National Agricultural Investment Plan (2011-2015)
- 4- GOTG. Programme for Accelerated Growth and Employment (PAGE) 2012-2015.
- 5- Intended nationally determined contribution of The Gambia
- 6- MOFEA. 2013. Level of Achievement of the Millennium Development Goal (sic) (MDGs) – MDG Status Report 2012-  
[http://www.gm.undp.org/content/dam/gambia/docs/GMB\\_UNDP\\_Final%20MDG%20Report.pdf](http://www.gm.undp.org/content/dam/gambia/docs/GMB_UNDP_Final%20MDG%20Report.pdf)
- 7- National Forest Action Plan (NFAP) 2019 – 2028, The republic of the Gambia
- 8- Republic of The Gambia National Report 2012
- 9- Sillah, J. (2013) *Fire Management in The Gambia for the Fouta Djallon Watershed Management Project*. FAO
- 10- The Gambia Sustainable Energy for All: Rapid Assessment and Gap Analysis (2012)
- 11- The Gambia country report on Biodiversity for Food and Agriculture
- 12- The national biodiversity strategy and action plan (2015 – 2020); The republic of the Gambia