ABSTRACTS OF PRESENTATIONS FOR ACTIVITY CLUSTER 5: ON THE GROUND ACTIVITIES

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1. Asahi Kasei Corporation
2. BirdLife International
3. Centre of Culture Identity and Resources Use Management (CIRUM)
4. Conservation International
5. Forest Peoples Programme (FPP)
6. Green Senegal
7. International Network for Bamboo and Rattan (INBAR)
8. Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPCCA)
9. Live & Learn Environmental Education, Cambodia
10. Ministry of Environment and the Forest Resources, Togo
11. Ministry of Environment and Water Resources, Chad
12. Ministry of Forestry and environment, Gambia
13. Ministry of Forests and Soil Conservation, Government of Nepal
14. National Environmental Council for Sustainable Development (CNEDD), Niger
15. National Herbarium & Botanical Gardens of Malawi
16. United Nations Development Programme (UNDP)

1. **Title: Conserving biodiversity by utilising wood thinned from forests as biomass fuel for power generation**

Member organisation: Asahi Kasei Corporation, Gokase River Satoyama Project
Presenter: Takashi Yamaguchi, Manager, Asahi kasei Corporation General Affairs, Hiroaki Araki, Manager, Asahi kasei Corporation Energy Division, Nobeoka Power Supply Dept. hosomi.hb@om.asahi-kasei.co.jp

Asahi Kasei is planning to sustainably utilise the forest resources of the watershed area of the Gokase River in Miyazaki for biomass power generation, in order to conserve biodiversity and reduce the use of fossil fuels.

The Gokase River watershed area includes both flatlands and mountainous areas, with cedar and cypress trees planted in the mountainous areas for forestry purposes. The cedar and cypress are over 30 years old, mature enough for use as timber. The forestry business, however, has declined markedly due to increased imports of cheap lumber since the 1970s. As a result, some forests are left untouched with no thinning work performed. Even where forests are actively managed for timber production, thinnings, which are unsuitable for use as construction material, are often left discarded on the ground. In both cases, this makes it difficult for natural groundcover to grow due to a lack of sunlight. This has not only altered the socio-ecological production landscape, but is believed to have caused a decrease in biodiversity.

To improve this situation, Asahi Kasei intends to utilise woodchips obtained from the Gokase River watershed area as biomass fuel at a new power plant which will start operation in July 2012. In mixed combustion with coal, the plant will use approximately 100,000 tons of wood biomass per year—In terms of energy content, biomass fuel makes up over 60 per cent of the total fuel use.

By utilising heretofore-discarded forest resources sustainably, this project is expected to facilitate a revitalisation of the ecosystem, restoring the natural biodiversity as well as the forest's groundwater recharge function. In addition, commerce in woodchips is expected to invigorate the forestry industry as well as the overall economy of the region with increased employment.

This programme is Asahi Kasei's second major effort for the conservation of biodiversity in Miyazaki. In 2007, in collaboration with the local government and landowners, the organisation began cutting down man-made forests which no longer functioned economically and planting broadleaf trees native to the area to restore the natural ecosystem.

The major challenge for the Gokase River Satoyama Project is to lower the price of wood biomass fuel obtained from the Gokase River watershed area to the same level as that of coal. In cooperation with forestry associations in the neighbourhood areas, Nobeoka City, and Miyazaki Prefecture, Asahi Kasei will identify the factors that make the price of wood biomass fuel higher than that of coal, and study the requirements for the establishment of an economically feasible system.

2. **Title**: **Together for Birds and People: conserving threatened birds through the maintenance of socio-cultural landscapes**.
   Member organisation: BirdLife International
   Presenter: Mayumi Sato, Researcher, sato@birdlife-asia.org

BirdLife International is a Partnership of over 100 national organisations with a shared mission to "Conserve wild birds, their habitats and global biodiversity, by working with people towards sustainability in the use of natural resources". The Partnership identifies and monitors the status of the world's birds (BirdLife International is the official Red List Authority for birds for the IUCN Red List) and has worked together with partners in government, civil society and the corporate sector, to identify priority sites for bird and biodiversity conservation around the world. Data shows that one of the biggest threats to sites and species is agricultural intensification. On the other hand many species of bird are conserved through the maintenance of traditional, socio-cultural systems and many BirdLife Partners are working nationally, or in collaborative regional projects, to support biodiversity conservation in socio-ecological production landscapes.

This presentation explains this background and introduces some of these initiatives, with examples from the Americas, Europe, Africa and Asia. The following case studies will be discussed:

- **Traditional management of the great biome of the 'Pampas' or grasslands of the Southern Cone of South America**, home to over 400 species of native grasses, 280 bird species, 75 reptiles and amphibians, and more than 85 mammals. An alliance of four BirdLife Partners has been working to establish 'Standards of Excellence for the Management and Quality of Natural Grasslands Beef in the Southern Cone of South America'.
- **Conservation of traditional and highly sustainable farming and forestry systems such as cork-oak open forests (Montados) and cereal-fallow steppes in Portugal**. These systems deliver significant public goods in terms of biodiversity conservation, watershed management and climate change mitigation.
- **Traditional management of the Kinangop Grasslands in Kenya's Central Province**. The traditional grazing practices which maintained a unique grassland structure and biodiversity are now in decline.
- **Support to Integrated Farming and Biodiversity Areas (IFBAs) in Cambodia**. This new category of protected area is helping to conserve traditional grassland landscapes critical to the survival of Bengal Florican, Houbaropsis bengalensis, a bustard of the Indian Subcontinent and South-East Asia, that has suffered a dramatic decline owing to the widespread and ongoing conversion of its wet-grassland habitat for agriculture.

3. **Title: Management and conservation of forest resources by modifying the land use planning and forest allocation in Bac Lang Commune, Dinh Lap District of Lang Son Province, Vietnam**

Member organisation: Centre of Culture Identity and Resources Use Management (CIRUM)

Presenter: Nguyen the Chien, Natural Resource Manager, Vietnam, tthoa@cirum.org

Rapid population growth in the past 20 years, inadequate or inappropriate land use planning, overuse of natural resources has resulted in the degradation of natural forests in the Lang Son province of Vietnam. Local households have no efficient land use plans because of conflicts about forest land management among members of ethnic minority households. Free and unlimited access to collect non-timber forest products and illegal logging has caused forest degradation and deforestation. Forest ecosystem and Biodiversity are broken.

Ethnic minority groups and local authorities have carried out adjustments to land use planning and forest allocation in Bac Lang with support from the Centre of Culture Identity and Resources Use Management (CIRUM). The biggest challenge in the process of land use planning and forest allocation is the resolution of conflicts regarding land area and boundaries, ownership of equal ownership at the household level at household level and rights to access and use the community forest. Through the adoption of a participatory approach land use planning and forest allocation have been modified to the satisfaction of the community and conflicts resolved. The new land use planning satisfies local communities and forest owners identify well where their forest with specific boundaries in the field is.

After obtaining the certificate of land use rights, farmers and communities have now made plans to manage forests and use land efficiently. Community forests are covered by the Forest Protection and Development Regulation. Community- Based Organisations (CBOs) on Forest Protection and Forest Use have been established, forest ecosystems and biodiversity are being restored and genetic resources are being preserved.

Keywords: Deforestation and forest degradation, Land use planning and forest allocation, Biodiversity rehabilitation, Land conflict resolve, Customary law based community forest management

4. **Title: Conservation International's Satoyama activities**

Member organisation: Conservation International (CI)

Presenter: Yasushi Hibi, Vice President for Asia Policy and Managing Director, Conservation International Japan Programme, y.hibi@conservation.org

Conservation International (CI)'s mission is very aligned with the Satoyama Initiative: building upon a strong foundation of science, partnership and field demonstration, CI empowers societies to responsibly and sustainably care for nature, our global biodiversity, for the well-being of humanity. CI, through its offices in more than thirty countries, conducts many projects worldwide that have relevance to the focus of Satoyama Initiative. CI's forest carbon program and conservation coffee program are described here.

Projects in the forest carbon program aim to deliver benefits to climate mitigation/adaptation, biodiversity and community simultaneously. Such delivery may be checked and ensured if combined with third-party validation and verification under the Climate, Community and Biodiversity Standards (CCB Standards). The primary interest in the project areas is sustainable use of land, regardless of whether the purpose of a project is to restore degraded forest land or to protect intact ecosystems. Emphasis is on the development of the social structure in which the proper use of land makes sense.

The conservation coffee program aims to produce coffee while contributing to the well-being of the community and conservation of biodiversity. Shade-grown coffee production does not require clearing of forest for farmlands, and can also be coupled with reforestation activities. It is a demonstration that nature conservation and human economic activities can coexist.

Impacts that field demonstrations (i.e., projects) produce are the thrusts as we amplify conservation outcome to larger policy, market, and social changes.

5. **Title: Customary sustainable use of biodiversity by indigenous peoples and local communities: synergising on-the-ground implementation of the Satoyama Initiative and CBD Article 10(c)**
   Member organisation: Forest Peoples Programme (FPP)
   Presenter: Maurizio Farhan Ferrari, maurizio@forestpeoples.org

The *Satoyama* Initiative (SI) is a timely effort to bring the world's attention to the fact that "*protecting biodiversity entails not only preserving pristine environments, such as wilderness, but also conserving human-influenced natural environments, such as farmlands and secondary forest, that people have developed and maintained sustainably over a long time*" (http://satoyama-initiative.org/en/about).

Although the SI is new, it should be developed and implemented complementarily with existing Articles of the Convention, especially with Article 10* as both aim to promote customary sustainable use that provides positive outcomes for biodiversity and human wellbeing. The COP-10 Decision on Sustainable Use states:

Recognises and *supports* further discussion, analysis and understanding of the *Satoyama* Initiative to further disseminate knowledge, build capacity and promote projects and programmes for the sustainable use of biological resources, and promotes synergy of the *Satoyama* Initiative with other initiatives or activities including…. to advance understanding and implementation of customary use in accordance with Article 10 (c) of the Convention on Biological Diversity;

FPP has carried out on-the-ground work with indigenous and local community organisations on customary sustainable use, using Article 10(c) as a point of reference, since 2003. Indigenous peoples and support organisations from Bangladesh, Suriname, Guyana, Cameroon, Venezuela and Thailand have produced case studies and participatory land and resource use maps combining traditional knowledge with Global Positioning System (GPS) and Geographic Information Systems (GIS) technologies. The maps illustrate the extent and scope of indigenous territories and the significance and importance of the territories and resources for the livelihoods of indigenous and local communities. The studies provide insights into the sophistication of local management systems and the remarkable complexity of customary law systems, which guide the responsible use of resources. They also describe the threats that their customary management systems are facing and provide recommendations to local and national governments on actions that should be taken in order to improve support for these age-old sustainable management systems, as on-the-ground initiatives need a supportive policy and legal environment at the national level to thrive and flourish. This is also recognised by the Parties; the COP-10 Decision on Sustainable Use reads:

3. *Invites* Parties, other Governments, and relevant international and other organisations to:

(e) Address obstacles and devise solutions to protect and encourage customary sustainable use of biodiversity by indigenous and local communities, for example by incorporating customary sustainable use of biological diversity by indigenous and local communities into national biodiversity strategies, policies and action plans…

This presentation will share experiences and lessons learnt from these on-the-ground activities and address important requirements for the maintenance, strengthening and revitalisation of customary sustainable use practices, which are relevant to effectively implement both the SI and Article 10(c).

* Article 10 "… protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements."

6. **Title: Restoration and development of Ndoff saline soils in an attempt to step up rice production in Senegal**

Member organisation: Green Senegal
Presenter: Vore Gana Seck, Director, voregana@yahoo.fr

Senegal imports 600,000 tons of rice annually. In order to reduce the cereal deficit, the Senegalese government has undertaken the restoration and the valorisation of saline soils. The Ndoff Valley project was set up in 2002 for this purpose. This paper describes the results of four activities. Firstly, the building of a dam to store rain water and stop the influx of saline water from the river. Secondly, a hundred and twenty women were trained in seed production techniques. Thirdly, trials were conducted to test the adaptability of local rice cultivars to soil salinity. These trials investigated the effect of tillage (flat and ridge), type of sowing (direct and transplanting), type of fertilisers (mineral and organic) on rice yields.
Fourthly, a number of women from several communities took part in the production of rice seed.

Three types of landscapes were identified as suitable for rice production: 1) the uplands for early varieties (90 days): Same Sakhame, Gafrith, Electer 1; 2) the intermediate slope lands for early varieties that are tolerant to temporary flooding: Momobal, Momorane, Electer 2 ; 3) the flooded lands for late varieties (120 days): Bacoundabal, Bacoundayèkh, Sintango. Recorded difficulties include erratic rainfall, salt accumulation and constraints in dam management. The dam enabled desalinisation of up to one kilometre of saline lands. Flat land preparation is more appropriate than the ridge land preparation for upland and intermediate rice due to reduced salt accumulation, plant mortality, and labour requirements. Transplanting is best suited to flooded fields. Yields varied between 511 and 6222 $kg.ha^{-1}$, indicating that rice cultivation is reliable in the Ndoff Valley.

Key words: Saline soils, Ndoff, Local rice cultivars, Dam, Flat and ridge land preparations, Transplanting

7. **Title: Discovering and conserving Satoyama landscapes: an example of bamboo forests in China**

Member organisation: International Network for Bamboo and Rattan (INBAR)
Presenter: LOU Yiping, Director, Environmental Sustainability Programme, yplou@inbar.int

Bamboo groves are frequently part of complex but balanced farming systems where they provide ecosystem services such as protection against soil erosion, water management and wildlife protection as well as materials for use on the farm and for harvesting, processing and/or direct selling to generate income.

Many Asian, African and South American landscapes where bamboo is available are illustrative examples of socio-ecological production landscapes that provide environmental services while providing income/livelihood and economic returns. For example the Hmong people in Yunnan in China regard bamboo as a sacred plant because it serves the people in myriad ways and has been indispensable for their very existence and cultural survival. The Hmong have traditionally utilised bamboo for hunting, and as protection against aggressors, and nowadays use bamboo for making crafts for generating income while they consider bamboo forests surrounding their villages to be the protectors of their environment.

INBAR's interventions and field projects include pilot and demonstration activities on environmental protection and livelihood development through workshops, training activities, and policy development initiatives aimed at increasing capacities of national and local actors to implement economic and land planning policies in favour of biodiversity conservation and livelihood security for rural communities. INBAR has been working in many Satoyama-like landscapes in Sichuan, Yunnan, Hunan, Zhejiang provinces in China.

Since INBAR's involvement in the Satoyama Initiative in 2009, some preliminary observations and surveys of the features and social elements of the Satoyama-like landscapes in the project sites have been made. INBAR will prepare a case study for the initiative in 2011. This presentation will introduce INBAR's initial discoveries, findings and thoughts on Satoyama-like landscapes using the illustration of bamboo groves as major natural and social components in China. INBAR's strategy to promote the work globally through its worldwide network will also be presented.

8. **Title: The Indigenous Peoples' Biocultural Climate Change Assessment (IPCCA) as a vehicle for supporting resilient biocultural territories**

Member organisation: Indigenous Peoples' Biocultural Climate Change Assessment Initiative (IPCCA)

Presenter: Alejandro Argumedo & Marina Apgar, IPCCA Secretariat, Associacion ANDES, Peru, ipcca-secretariat@andes.org.pe, marina@andes.org.pe

The IPCCA , which is building resilience in socio-ecological production landscapes and biocultural territories, is an innovative indigenous response to climate change. The initiative aims to enable and support well-being (*Buen Vivir*) understood as a harmonious relationship between people and nature. Indigenous people have nurtured their landscapes through their traditional practices and knowledge to maintain resilience. In the face of global change, and in particular in extreme climatic events and climate change, it is vital to use methodologies that strengthen indigenous biocultural territories, bringing together science and traditional knowledge to build resilience. Currently, nine local initiatives are being conducted by indigenous communities from the Amazon to the Arctic, using traditional knowledge and practices combined with science in multi-stakeholder participatory processes to assess climatic and ecosystem conditions and trends to build adaptive responses for poverty reduction, sustainable livelihoods and food security. Within the on-the-ground activities cluster of IPSI, the IPCCA can provide methodological and conceptual tools for working across diverse socio-ecological systems, supporting horizontal networking and providing vehicles for producing synthesised results that respond to challenges both locally and globally. Strategic goals of the IPCCA include packaging results into policy documents that may enable improved support for local initiatives.

9. **Title: Heritage Livelihoods – Looking back to see ahead: Engaging Communities in World Heritage Management in Cambodia**

Member organisation: Live & Learn Environmental Education, Phnom Penh, Cambodia
Presenter: Jady Smith, Programme Director, jady.smith@livelearn.org

Cultural World Heritage Sites, some of which have been termed cultural landscapes, are of significance for biodiversity conservation due to the size of the protected areas and can be considered socio-ecological production landscapes. These sites have often been overlooked for their value in biodiversity conservation but there are complimentary links between the historical and cultural human and biodiversity interactions in these sites. As historical population centres that typically still have active populations, there are significant historical and modern concepts for the sustainable use of biodiversity to be drawn from them. Heritage is typically understood to include natural and cultural heritage, but heritage can also be viewed as tangible or intangible. In the past there was a very strong focus on tangible heritage specifically the protection of physical structures. This focus on tangible heritage may sometimes have been at the cost of intangible heritage and specifically local communities.

One World Heritage site of significance is the Angkor Complex in the Siem Reap Province of Cambodia. Angkor is one of the most important archaeological sites in Southeast Asia. Stretching over some 400 square kilometres, including forested area, the Angkor Archaeological Park contains the magnificent remains of the different capitals of the Khmer Empire, from the 9th to the 15th century. The Angkor site is a socio-ecological production landscape of historical and current significance. Historically the empire is thought to have ended due to climatic changes. The APSARA National Authority responsible for management of the Angkor site and the New Zealand Ministry of Foreign Affairs and Trade have developed the Angkor Participatory Natural Resource Management & Livelihoods programme.

The greater good of protecting World Heritage can sometimes have unintentional consequences for local communities. Within World Heritage Sites, such as Angkor, there are a range of regulations that visitors and communities living within the site must abide by. Those same regulations could be used to better manage the natural heritage of these sites. There is a growing appreciation of intangible heritage and need for more holistic management of World Heritage sites and protected areas with local communities. A Community-based Heritage Livelihoods approach is being trialled to promote management of cultural and natural heritage by enhancing livelihood opportunities for communities. The approach is being developed at the cultural landscape of Angkor World Heritage Site but has replication potential for other cultural and natural protected areas.

The Heritage Livelihoods approach is based on a community mobilisation model, using 6 steps to guide the process: Prepare & Plan, Listen & Learn, Discuss & Develop, Adapt & Act, Supply & Support and Monitor & Mentor. Within these steps we facilitate community thinking around heritage and livelihoods. This approach seeks to redress such potential consequences and build on positive potential for local communities within the site. There is significant potential for Heritage Livelihoods. This approach is an adapted form of the DFID Sustainable Livelihoods Approach linked to understanding five core assets—human, social, natural, physical and financial. The specific focus however is to promote those livelihoods which positively impact natural and cultural heritage. Heritage Livelihoods seeks to combine models in order to propose a holistic response to effective management of natural and cultural heritage.

10. **Title: Restoration and sustainable management of the highly deteriorated soils of the Northern Togo**

Member organisation: Ministry of the Environment and the Forest Resources, Togo
Presenter: Kossi Agbodji, Ministry of the Environment and the Forest Resources, Togo,
Kossithomas@yahoo.fr

Located on the western side of Africa between the latitude 6° and 11° north and between the longitude O° and 2° east, Togo is open to the Atlantic Ocean in the Gulf of Benin on the south and limited on the north by Burkina-Faso, at the East by the Republic of Benin and on the west by Ghana. The Republic of Togo covers a surface area of 56,600 square kilometres with a population estimated at 6,500,000 in 2010. It is characterised by an annual growth rate of 2.9 per cent and has an average density of 115 inhabitants per square kilometre.

The deteriorated zone is composed of savanna region and the Kara region. The zone enjoys a tropical climate characterised by one dry season and a rainy season with an average temperature of 28°C.
The types of soils in this area are (i) washed tropical ferruginous grounds; (ii)un advanced grounds in erosion and; (iii) humus-bearing hydromorphic grounds with gley whose physical properties are unfavourable with agriculture.

The vegetation is composed of clear forests, dry forests and shrubby savannas. The majority of the farmed acreages are agroforestry parks.
The economy of the area is primarily agricultural (millet, Black-eyed peas, groundnut, sorghum and cotton), and trade is based on the exchange of agricultural and manufactured goods.

The identified problems are: (i) a decrease in soil productivity, (ii) the cultivable depressions in these areas; (iii) the loss of arable lands; and (iv)the increase in population and the search of space in these areas.

Activities to fight against the degradation of the soils in progress (basic scenario)
To fight against transition into savanna which constitutes the main reason for soil impoverishment, the Government instituted June 1 as the Day of the Tree, in 1977. On this day each citizen has to plant at least one tree.
Terraced agriculture practised by the populations on the sides of the Kabyé mountain constitutes the only experiment in conservation in farming areas in the erosion zone.
The majority of the cultivated areas are agroforestry parks, where various tree species, whether fruit-bearing or not, are managed fertilizing the fields of the peasants and having nutritive and therapeutic virtues. In the north, *Parkia biglobosa, Prosopis africana, Vitellaria paradoxa, Adansonia digitata* are the species most frequently planted.

Activities to build the capacity of the rural populations and organisations for an effective management of their soils are undertaken by NGOs such as INADES Formation, CARE International, Iles of Peace and RAFIA.

11. Title: Protected areas in Chad

Member organisation: Ministry of Environment and Water Resources, Chad
Presenter: Habib Gademi, CBD National Focal Point, hgademi@hotmail.com

Chad has three National Parks (491,952 hectares), 7 Wildlife Reserves (11,675,300 hectares), a Biosphere Reserve (195,000 hectares), 10 Forest Reserves and 10 Hunting Area (11,742,800 hectares) which cover about 11 per cent of the country.

Some of these areas have maintained the status of their biodiversity, while others have suffered an early breakdown.
Zakouma Park, with an area of 300,000 hectares, set up in 1963, has retained its diversity, and remains the richest protected area in the country despite all the hazards and anthropogenic challenges.
Manda Park, once rich in animal and plant species, was listed in 1965 with an area of 114,000 hectares. It is now an isolated forest with relatively well-preserved vegetation but depopulated.
Wildlife reserves in the Sudan zone (Barh Salamat Siniaka-Minia) classified in 1961 with an area of 426,000 hectares, play a very important role although their current status is threatened by population pressure.

Wildlife reserves in the Sahelian zone (Wadi Rime, Wadi Hashim) classified in 1969 with an area of 80,000 hectares is a large area but the majority of species such as the oryx and addax are endangered or have disappeared due to the lack of protection from human actions but also due to the high aspect drastic climate.

The Wildlife Reserve Fada Archei is an undeniable treasure of Chad. There are crocodiles that are congeners to the ones in the Nile or Congo but smaller and thus constituting a real biological curiosity, but whose identification is yet to be done.

Extensive work has been completed recently, with funding from the European Union, French Cooperation, and German cooperation for the restoration of national parks (Zakouma and Manda) and natural resources of Mayo-Kebbi. According to the interim report of the implementation of the national biodiversity law (1998), a. 4318 plant species including 71 endemic and 11 threatened species and b. 772 species of animals besides insects have been estimated in Chad. Among these species, 15 mammals, 4 birds, crocodiles and monitor lizards are fully protected. Over 21 species of mammals and 8 bird species are partially protected. Of the 772 species, 4 mammals–Black rhinoceros (Rhinoceros Diceros bicornis), the African manatee (Trichechus senegalensis), Oryx (Oryx gazella dammah) and the Kouri cattle (Bos taurus typicus), a bird – the River prinia (Prinia fluviatilis), a reptile and 16 fish are endemic.

12. **Title: Diversifying protected area governance for enhanced local participation in biodiversity conservation and sustainable use in The Gambia**

Member organisation: Department of Parks and Wildlife Management, Abuko Nature Reserve, The Gambia

Presenter: Alagie Manjang, Assistant Director, Department of Parks and Wildlife Management, alagie33@hotmail.com

Although The Gambia is among the smallest countries in Africa, it is rich in biodiversity. Biodiversity and the natural resource base as a whole are under increasing pressure to provide resources for subsistence living and economic development. Many of the practices employed to utilise the natural resource base have significant negative effects on biodiversity. There is a general lack of understanding by, not only, the general public and business owners, but also within government institutions about the importance of biodiversity and its role in economic development and the environment.

There has been steady increase in the loss of biodiversity particularly on public and private lands where no system of active protection exists. To a large extent, low public appreciation and understanding of biodiversity has been a major reason for the loss of biodiversity. Biodiversity conservation and general environmental management has been to the many Gambians, a matter of government.

Protected area management in the Gambia is now moving towards participatory management as a progressive shift in both concept and approach. A project entitled Supporting Gambia Action for CBD Programme of Work on Protected Areas assists the government of The Gambia to take direct action to cultivate common societal attitudes towards biodiversity conservation and sustainable use in accordance with its biodiversity vision —a society in harmony with nature. The implementation of the project enabled the government to engage existing public and local institutions including the general public in taking direct actions to manage and conserve biodiversity. Through a nationally suitable co-management strategy built on coordinated action among the various stakeholders, biodiversity friendly attitudes and actions required in the long-term to protect and manage biodiversity in public and private lands are being established.

13. **Title: Contribution of community forestry to the conservation and sustainable use of biological diversity in Nepal**

Member organisation: Ministry of Forests and Soil Conservation, Government of Nepal
Presenter: Krishna Chandra Paudel, Joint secretary and Chief, Environment Division, Nepal, kcpaudel@hotmail.com

Forest resources play a central role in the mountain farming systems in Nepal. A majority of the Nepalese people depend on forests for food, fodder, fuel wood, medicine, timber and non-timber forest products for their livelihoods. Until the mid-70's, forests in Nepal were under government control systems which could not effectively protect them due to various reasons including lack of government capacity and local ownership over the resources. After the introduction of the innovative approach of community forestry in the mid-70's, forests in the mountains of Nepal are once again productive. Forest ecosystems have been restored, biodiversity has been conserved and sustainably utilized. According to the Community Forestry policy, parts of government forests can be handed over to the local communities for management and utilization. This approach has encouraged involvement and empowerment of local communities in the protection, management and utilization of forest resources.

Over the years, the Forest Act, Rules and Procedures has been refined. About one third of the Nepalese population is engaged in managing about 1.3 million hectares of forests through more than 15000 Community Forest Users Groups (CFUG). Forest based micro-enterprises have been established in a few community forests thereby creating additional employment and income opportunities at the local level. Community forestry is considered a vehicle that drives rural development and good governance in Nepal.

This presentation highlights the contributions of community forestry in the conservation and sustainable utilization of forest biodiversity and rural development in Nepal and the potential role it can play in ecosystem management at the landscape level.

Key words: *Community Forestry, Biodiversity, Nepal*

14. Title: Assisted forest regeneration in the Republic of Niger

Member organisation: National Environmental Council for Sustainable Development (CNEDD), Niger

Presenter: Boukar Attari, Councilor of CNEDD, attariboukar@yahoo.fr

This process consists of training local farmers by the government agencies in the procedures to regenerate forests. Local farmers are encouraged to protect specific tree species on their farmlands in order to conserve biodiversity and to increase biomass production.

The benefits associated with this technique are:

- ✓ An increase in soil fertility;
- ✓ Fuel wood supply;
- ✓ Non timber products such as fruits, leaves and bark for medicinal purposes.
- ✓ Food for livestock;
- ✓ Soil protection against water run-off, etc.

15. **Title: Farming with trees in smallholder subsistence agriculture systems in Malawi**
    Member organisation: National Herbarium & Botanic Gardens of Malawi
    Presenter: J. H. Seyani, Director General, National Herbarium & Botanic Gardens of Malawi, P. O. Box 528, Zomba, Malawi

The production landscapes for smallholder subsistence farming systems in many parts of Malawi are characterised by the existence of multi-purpose tree species. These trees are managed in harmony with a variety of annual crops, mainly maize, tobacco, groundnuts or soybeans, and are a source of goods including fruits, fodder, timber, firewood, and medicinal plants and provide services such as nitrogen-fixing and soil fertility/improvement , shed, carbon sequestration, acting as windbreaks, etc. These trees are remnants of the original savannah woodlands, seedlings regenerating naturally, regenerations from old stumps/rootstocks, or merely selected tree plantings by farmers themselves. The tree density per acre of land has been found to be positively correlated with landholding size and human population pressure.

Over 70 tree species are managed by farmers on their land and most are indigenous plants that have multiple uses (i.e. *,Bauhinia thonningii, Faidherbia albida, Acacia polycantha, Strychnos spinosa, Uapaca* spp), while the other spectrum is occupied by exotic timbers, fruit, fodder or nitrogen-fixing plants (i.e., *Eucalyptus* spp, *Toona ciliata, Leucaena leucocephala, Mangifera indica*). This traditional farming system is also important for conserving biological diversity and for storing valuable germplasm in farmers' fields. Hence, tree farming in smallholder subsistence farming systems in Malawi is likened to the Satoyama socio-ecological production landscape where interaction between farmers and nature has maintained biodiversity and provides humans with goods and services needed for their livelihoods.

16. **Title: Scaling up community-based landscape management and sustainable community development**

Member organisation: United Nations Development Programme (UNDP)
Presenter: Fumiko Fukuoka, UNDP

Ecosystems, species and genes—the building blocks of biodiversity—are being lost across the world at an unparalleled pace. In recent years, significant progress has been made in expanding the network of Protected Areas (PA), which provide a vital refuge for many species of plants and animals and which supply vital ecosystem services. Yet, much biodiversity remains outside of the PA system on production lands for agriculture, forestry and other land uses and in water bodies used for fisheries fisheries. The fate of this biodiversity, and of vital ecological processes that cannot be sustained within protected areas alone, will depend on the sound management of these environments.

In many cases, local communities have been the chief users and guardians of the world's ecosystems and primary agents in the creation of climate-resilient landscapes. They have developed biodiversity-friendly farming systems and resource use management practices. Therefore, it is critical to assist local communities to realise their maximum potential for local capacity and actions for sustainable community development in promoting socio-ecological production landscape management. Considering climate change and associated risks, it is important to give due consideration to assisting communities to maintain climate resilient ecosystems. It is also imperative to scale-up good practices on the ground by producing and sharing knowledge and communicating them to the policy process. In this way, good efforts on the ground will be linked to supporting the development of coherent policy and providing necessary capacity development at all levels, rather than leaving those good practices as fragmented pieces of actions.

To realise the above vision, the Ministry of Environment of Japan (MOEJ), the Secretariat of the Convention on Biological Diversity (SCBD), the United Nations Development Programme (UNDP), and the United Nations University (UNU) will jointly pursue the Community Development and Knowledge Management Project, aiming at the promotion of the Satoyama Initiative.

The community development component of the project will leverage existing experiences, resources, and networks in sustainable human development for the long-term benefit of local communities and ecosystems. The knowledge management component, in turn, will produce and share knowledge outputs (replicable and up-scalable practices) from the community development component to promote sustainable socio-ecological production activities, based on the five principles of the Satoyama Initiative. The effort is intended to promote partnership at all levels, local, national, regional and international, through the collaboration with UNU, MOEJ and SCBD, as partnerships would be the key to the promotion of sustainable management of productive landscapes.