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Thematic session 5

« The role of regional and local authorities in the management of natural resources in the context of climate change »

19 January 2010 – 8.30 – 12.30

SUMMARY

Chair: **Mr Charles Katiza**, Chairman of ACP Local Government Platform

Coordinator: **Mr Alexis De Bertoult**, Adviser for the FAO Decentralised Cooperation Programme

Rapporteur: **Dr. Joseph Matowanyika**, Consultant on food security, Zimbabwe

Greenhouse gas emissions from forestry and some sectors of agriculture contribute about a third of current annual total emissions. However, the farm industry can also mitigate the impact and improve food security by using appropriate agricultural practices and managing natural resources sustainably. Regional and local authorities have the powers and/or are organised in such a way as to ensure the sustainable management of natural resources in their territory in order to guarantee food security in the face of risks related to climate change. Such measures are achieved in practice through::

- *integrated management plans for natural resources at territorial level, covering specific agroecological areas*
- *the development of decentralised mechanisms and capacity building to manage natural risks*
- *the development of food security policies that incorporate climate change and propose adaptation mechanisms*
- *access to decision-making tools and technologies developed by the research community*

The session highlighted their impact on food security and the relevance of the work carried out at decentralised level. It also setted out some recommendations on how to pool such efforts by identifying the tools and methods required by those involved in projects.

The following report sums up the presentations of the panellists, highlights the key points of the debates and emphasizes the recommendations to improve local and regional actions in the area of food security.

SESSION PANELLISTS/PRESENTERS[1]

1. **Mr Stephane Jost**, Liaision Officer, Natural Resources and Environment Department, FAO
2. **Mr Aliou Niang**, President, Saint-Louis Region (Senegal)
3. **Mr Jean-Philippe Bayon**, Vice-President for International Solidarity and Decentralised Cooperation, Rhone Alpes Regional Council, France
4. **Mr. Simon Chabot**, Director, Centre de Valorisation Internationale de l'Expertise Publique, Quebec, Canada

[1] Full presentations and speeches are available on the summit website (Background documents) : http://www.regionsfoodsummit.org/

5. **Dr. Abu Wali Raghib Hassan**, Sub-Component Manager, "Livelihood Adaptation to Climate Change" Project (FAO-DAE) Department of Agricultural Extension, Ministry of Agriculture, Dhaka, Bangladesh
6. **Mr Dosteus Lopa**, EPWS Programme Manager, Equitable Payments for Watershed Services, EPWS, CARE International, Tanzania
7. **Dr Moussa Djire**, Faculty des Sciences Juridiques et Politiques, Universite de Bamako, Republic of Mali.
8. **Mrs Catherine Combette**, Deputy Head of Unit, ACP and South Africa, FAO, Food Aid, Directorate General for Agriculture and Rural Development, European Commission

I. PRESENTATIONS OF THE PANELLISTS

INTRODUCTION BY CHAIR

The chair explained the purpose of the session and emphasised that at the end the participants should make recommendations for plenary's consideration as part of the final resolutions of summit.

1. **Keynote presentation :** The challenge of managing natural resources to guarantee food security in the context of climate change, **Mr Stéphane Jost,** Liaison Officer, Natural Resources and Environment Department, FAO

This keynote presentation provided some critical data on global trends in food security over the last few decades and into the next 40-50 years. It highlighted the multidimensional links between climate change and agriculture. Needed were significant increases in food production of 70% to feed 9billion people by 2050. Already by 2010 urban populations surpass rural populations and hence there are reduced numbers of food producers. The number of malnourished is already 1billion and the undernourished is 2 to 3 billion with around 90% in Asia and Africa. The figures are growing. Further, agriculture has received inadequate global financial and policy support over the last several decades. In the complex mosaic of the causes and effects of climate change, as presented in a spaghetti graph, it was noted that agriculture does make a 15% contribution to global greenhouse gases with deforestation and land use changes attributed to agriculture being the largest source of problems. Yet agriculture itself provides some of the solutions to the problems emanating from climate change and global warming.

The presentation pointed out some present and future food shortage hotspots where calorific intakes would be at risk including western part of the Mediterranean, West Africa, the Indian subcontinent including the Himalaya regions, the densely populated areas of the Far East, the islands in that part of the world and Southern Africa among others. A number of other outcomes of climate change will include increases in intensity of extreme events such as cyclones in the Indian subcontinent and in parts of North and South America, storms in western Europe, potential and fast threatened submergence of coastal conurbations in Africa and many of the small islands in the Pacific and other areas. Coastal Africa was pointed out as being especially vulnerable. Further, other effects would be serious land and soil degradation in the Amazon region, losses to mangrove habitats, increased water stress and loss of biodiversity and several other natural and human phenomena detrimental to food security and human welfare. The question was raised on why regions and local authorities, that are sub-national bodies, are the relevant spheres of action because:

- Regions are the most pertinent geographical spaces for addressing climate change. The spatial impacts of climate change are most visible at this level. Agro-ecological manifestations of climate change and food pressures are most evident at that level and not national or supranational/international levels.
- Regions are the best sources of information on food insecurity.
- They are best intermediaries between communities, national or international institutions.

It was further noted that regions could undertake the following activities:

- Mobilization and use of technical and financial resources.
- Participation in international governance of food security, such as in the Committee on World Food Security which was reformed in November 2009 to include more actors.
- Preparations of plans for the integrated management of natural resources.
- Undertaking capacity building of local communities, promoting people's participation and up scaling local knowledge from communities in food security matters.

On its part, the FAO offers assistance with data on food security trends and technical expertise in mitigation and adaptation to climate changes and agriculture. The Dakar Summit of the world's regions was requested

to present concrete and practical proposals for action by sub-national actors in this area which only started receiving attention in the last 4 to 5 decades.

2. **The Ferlo Silvo-Pastoral Area (Senegal), Rhône-Alpes Region (France)**

Programme for the Development of Managing Territories that Emit Less Greenhouse Gases and Are More Resistant to Climate Change in the Ferlo Silvi-Pastoral Area, Senegal, by Mr. **Jean-Phillipe Bayon**, Vice-President for International Solidarity and Decentralised Cooperation, Rhone Alpes Regional Council, France; and Mr **Aliou Niang**, President of Saint-Louis Region, Senegal.

This oral presentation illustrated decentralised cooperation between a region in the North (the Rhone Alps in France) and the South (the Ferlo Region of Senegal). Food was presented as a basic human right and the question asked: How will the world assure this right with a projected global population of 9billion? Economic refugees from Africa to Europe were essentially ecological refugees seeking such basic rights as food and decent livelihoods. Cooperation between Europe and Africa was therefore essential. The case of the Ferlo Region of Senegal, a silvi-pastoral area facing serious desertification is developing an integrated approach to managing local resources by territorial institutions. This approach is based on the principle: each person's humanity is interdependent with everyone's else's. The multidimensional project, supported by the United Nations Development Programme, undertakes diverse actions ranging including children's education, citizen responses to climate change, milk processing, improving agricultural machinery, re-afforestation for renewable energy based on eucalypts and fair and equitable trade. Grass roots communities define their futures and are encouraged to be proactive in achieving them. Cooperation between the two regions includes exchanges of experts, and material and financial resources. It is a new form of cooperation between the developed and developing world based on decentralised government structures.

3. **Mali.** *Local conventions, a tool for natural resources management : experiences from the Sahel area* by Dr **Moussa Djire**, Professeur d'Enseignement Superieur, Faculty des Sciences Juridiques et Politiques, Universite de Bamako, Republic of Mali.

Built on the premise that food security is a governance issue, this presentation emphasized the roles and complexities of multiple actors and institutions in managing local natural resources, the most substantial sources of incomes for rural populations in West Africa. These resources, however, face extreme pressures in increasingly fragile environs and failure by official institutions to understand how they work, resulting in precarious resource bases, conflicts and threats to food security. The presentation proposed local conventions as one important institutional arrangement in Sahelian and other African countries that reduce some of these problems. These questions are: What are local conventions? How have they been established? What have they achieved given the tremendous pressures on local ecological production bases in many African countries?

Local conventions pre-date colonial periods. But even now, most rural African lives are linked to local conventions such as totems. However, local conventions have been progressively eroded by the practices of government administrations, the work of non-governmental organisations and that of technocrats. Local conventions are diverse. They have been referred to as social contracts, rural charters, local codes, local protocols and other names. They place emphasis on relations between inhabitants in rural locales defining relations with outsiders. They are also the points of reference for local laws and customs, and rationalize local resource management establishing rules and regulations on access to specific resources. Written or unwritten, they can be built on specific resources such as forests and water or can be based on managing feeder roads between villages. They are often local mechanisms that seek community consensus and manage conflicts, establishing frameworks for negotiations on a range of issues. Local conventions can be indigenous or be constructed on external ideas after careful situation analyses and often validate negotiated arrangements with state and other external actors.

Local conventions, however, have constraints and limitations especially because they are not recognised in national legislations nor are they taken as legitimate institutional arrangements that can be used for legal protection. Nonetheless, local conventions were suggested as beneficial. They empower marginalised local communities while strengthening their links with states. They have been responsible for local ecosystem rehabilitation. They are important forums for dialogue with outsiders and present potentialities to give legitimacy to what rural communities do. They are an important manifestation that rural spaces are not empty territories. They are a reality to be reckoned with forming important tools in establishing decentralised administrative systems. When they are used to make commitments with formal signatures between local representatives, technical service people and state representatives, they are a potent tool for action.

4. Coastal Regions (Bangladesh)

Integration of Locally Developed Risk Prevention and Management Practices Within National Food Security Policy: Working with Farmers in Saline and Drought Prone Areas, by Dr. **Abu Wali Raghib Hassan**, Sub-Component Manager, "Livelihood Adaptation to Climate Change" Project (FAO-DAE) Department of Agricultural Extension, Ministry of Agriculture, Dhaka, Bangladesh

Bangladesh is vulnerable to extreme hazards such as floods, cyclones and tornadoes, its food base being heavily dependent on rice for its 150million inhabitants. Climate change impacts include declining land quality, increased food prices, more frequent hazards, water logging, salinization and sedimentation of the soils in the delta regions of the country. Food production is expected to decrease by 30% by 2050. In response, a climate change strategy has been developed with an adaptation programme of action. Farmer extension programmes and other activities to mitigate on climate change are in place. One activity, supported by the FAO, is the Livelihood Adaptation to Climate Change (LACC) project that works with local communities. After identifying communities' livelihood systems and their vulnerabilities to present and future climate changes, the project then examines local adaptation options, pilot tests them, builds local stakeholders capacities to implement the options and mobilizes the communities for such actions. Activities have included adjustment of existing agricultural practices to match anticipated future risks like changing and diversifying cropping patterns and farming systems, selection of adaptive crop varieties, better storage of seeds and fodder, and developing rice varieties that are flood resistant. In addition, local low level risk management integrates adaptive action with well planned inter-related short and long term measures such as improving local infrastructures like link canals, irrigation systems, drainage and water storage facilities. This multifaceted project also strengthens local community institutions and self-help capacities, improves local formal institutions and similar actions. Alternative options for cash generation are also promoted so as to enhance adaptive livelihood opportunities.

5. Morogoro Region (Tanzania)

Equitable Payment for Watershed Services (EPWS): Facilitating Service Delivery. A CARE/WWF Programme by Mr **Dosteus Lopa**, EPWS Programme Manager, Equitable Payments for Watershed Services, EPWS, CARE International, Tanzania

Implemented by an NGO, CARE International, this project seeks to modify unsustainable land use and improve "watersheds" for reliable supply/flow and quality of water to downstream communities while improving the lives of the communities whose responsibility is to sustainably manage the source catchments. Poor communities in the Uluguru Mountains 200 kilometres west of the Tanzania capital city Dar-es-Salaam, are expected to steward the integrity of the catchment and rehabilitate and protect the source of the Ruvu river which is the main source of water for the capital. This is vital for reliable clean water supplies to Dar-es-Salaam. DAWASCO, a company supplying water to the city and Coca-Cola International now make payments to improve the lives of the communities in Uluguru as an incentive to them. These communities have a high population growth and live largely from subsistence slash-and-burn shifting agriculture with low yields resulting in food insecurity. The project is establishing terraced agriculture with agro-forestry and riparian restoration. The communities have been trained on improved farming practices and better animal husbandry. With considerable land cover depletion, increased watershed degradation and worsening water turbidity, resulting in higher water treatment costs, DAWASCO and Coca-Cola are now engaged in this Equitable Payments for Watershed Services (EPWS) project because they must pay for ecosystem services protected by the communities who are guaranteeing the continuous flow of the services. This pilot project empowers local communities by getting resources from big users of the benefits of their efforts. Linkages between poverty reduction and environmental sustainability are sought. Payments are made to individual farmers and communities who get empowered and become more food secure.

6. Quebec (Canada)

Quebec's Added Value and Ability to Act in the Field of Food Security Related Natural Resources Management in the Context of Climate Change by Mr. **Simon Chabot**, Director, Centre de Valorisation Internationale de l'Expertise Publique, Quebec, Canada

Quebec is a large territory in Canada with a small population of only 7million. It has large quantities of natural resources comprising 2% of global forests and 3% of the world's surface water with 4500 rivers. Water management is an essential area. In 2006, a centre to enhance partnerships between Quebec and the rest of the world on climate change and environmental management was established with public funds. On the work of regions and municipalities, two areas have received attention. One is that of managing the agri-environment the other being on water policy. Joint action has been promoted between Quebec and others on climate change and food security. Quebec has strong farmers' organisations. Few actions succeed at the

regional levels without their full participation. Farmers have to be at the centre of activities largely organised at the sub-catchment level in Quebec. At that level, social and environmental resources merge with all stakeholders being involved. Water quality is also essential and hence integrated action to protect soils and water is always promoted. In agriculture, the centre is contributing toward action on issues of new pests, the development of new varieties and new agricultural practices in light of climate change.

On water policy, the centre has noted that Quebec has been wasteful in freshwater management and must work on improving efficiencies in light of climate change. The centre emphasizes that water is a collective heritage and good governance around it is essential. The centre is willing to share its expertise in promoting decentralised resource management.

7. *Taking into Account the Environmental Challenge and Climate Change Within a Public Policy : the Example of the Common Agriculture Policy* by Mrs **Catherine Combette**, Deputy Head of Unit, ACP and South Africa, FAO, Food Aid, Directorate General for Agriculture and Rural Development, European Commission

This presentation posited a question: What is the relevance of the European Common Agricultural Policy to the Summit? It briefly described how the CAP defines policy and action on agriculture and rural development at the EU27 level all the way down to the individual farmer. The EU currently is undertaking 109 rural development projects. 90 of these are at the regional level. Many are meant to share experiences between regions. One CAP challenge has been how to produce food with less pollution. Originally the CAP was not so concerned with pollution but now seeks to fully integrate soil and water pollution issues. This process was slow in coming as it was only properly developed in 1992, 30 years after the start of the CAP. It was only in 2008 that climate change was integrated into the CAP.

Further, the presentation posed the double edged issue of EU agriculture being part of the problem in climate change as it contributes 9% of greenhouse gases from methane gases and nitrous oxide yet it is also part of the solution through its mitigation role. The EU has already had to cope with heatwaves, storms and floods. However, it is projected that the most extreme effects will come after 2050. But the effects are already being felt. For an example, whereas in France vines were harvested in October before, now harvests have to take place in September. Extreme events are now common such as droughts in France in 2003, 2005 and 2008. Climate change will have potential impacts in agriculture in a number of ways. These include negative agriculture production in the northern part of the EU despite initial positive gains from warmer temperatures and reduced rainfall after 2030 with progressively negative impacts after 2050 of increased desertification. There will be significantly changed winter and summer rainfall patterns and distribution, reduced forestry, lower and more variable crop yields, poorer animal health, food price instability, production displacement and higher economic impacts on rural areas leading to less social cohesion.

In response, the EU has put in place an environmental policy and reformed the CAP to incentivize farmers to promote sustainable production systems. The approach has these basic principles:

- Farmers should respect basic environmental requirements without any compensation. The Polluter-pays-principle (PPP) applies. A polluter bears the expenses of carrying out pollution prevention measures or paying for damage caused by pollution.
- Cross compliance and eco-conditionality apply.
- However, where society desires that farmers deliver an environmental service beyond the reference level, then society should pay for that environmental service.
- In its rural development programmes are in-built agri-environment payments for using organic farming, reduction and better management of fertilisers, reduction, better management of plant protection products, including integrated production and diversification of crop-rotations and maintenance of set-aside areas, creation and upkeep of landscape/ecological features (such as field margins, buffer areas, green cover, hedgerows, trees), reduction of irrigated areas and/or irrigation rates to limit drainage, actions to conserve soil (such as labour techniques to prevent/reduce soil erosion) and other measures.

Further actions to promote sustainable agriculture include reducing conflicts between economic and environmental objectives. They include preserving and enhancing carbon stocks in farmland soils, improving energy efficiency and renewable energies production and on farm use. They encourage enhancing research into environmental technologies, improving farmers' awareness on climate change impacts on agriculture and emissions reduction as well as improving consumer's awareness of climate implications of food. The also promote exchange of experiences and further integration of climate concerns in the future development of the CAP. Farmers have responded and there is noticeable reduction in

polluting methods in agriculture. The implementation of these measures means local authorities are fully involved.

II. DISCUSSION

The paper presentations prompted responses and contribution as follows:

a) On Local Conventions

It was observed that in Burkina Faso, local conventions do indeed have a legal basis. Local communities have signed some agreements on basin management with the state in the Northern region of that country and a second agreement is being drafted. This makes Burkina Faso a pioneer in this. Some participants wished to share this experience with Burkina Faso.

In Cameroon, local conventions were being viewed as a pragmatic approach to manage resources such as forests. The suggestion was made that cross country and cross border cooperation on the development of local conventions would be desirable. A regional approach to local conventions would also be useful. However, in countries like Burkina Faso, regions are a new. A level of apprehension in their use at this stage was expressed. One practical way was to draw up regional/territorial development plans based on national plans incorporating local conventions within these plans. This would give some legal basis to local conventions. It would also encourage communities to enter into agreements with each other. The desirability of local conventions was reinforced within the context of the management of local geographic spaces, a desirable process which promotes efficient avenues for state investments. It was also identified as a very pragmatic way of using already existing resources. Spanish aid would be encouraged to invest in the promotion of such ideas. The question still remained on the definition of the local community which would enter into signed agreements with others. There also remains the challenge of creating a legal stability that gives legal authority to local community resource management. Some frameworks for strengthening inter-community local conventions exist although these are not formal. They need to be given legislatively authority.

b) On Climatic Change, Mitigation and Adaptation

It was reinforced by FAO that technical support in providing data and mapping risks can be mobilized by them. Representatives from some countries indicated their wish to have national action plans for adaptation and would require forecasts undertaken on droughts and other future extreme events. Tools already exist for this including those showing zones prone to flooding in the Sahelian countries.

An appeal was also registered that clear research on climate change that is based on regions is essential. Extreme events require that synergies be made among relevant actors on scientific research which involves and is properly understood by regional authorities. Monitoring of changes in the behaviour of micro-climates and impacts must be undertaken by regions. As well, regions should also come up with adaptation plans and use these to garner resources for research. Investments by states that are within these regional plans would yield substantive benefits.

In addition, some participants called for optimal and maximal use of soils, fertilizers and mechanization systems in addition to developing adaptive seed varieties. Further, the linkage between re-afforestation and other areas such as seed development was also advocated. All this requires scientific knowledge and increased research and resources must be mobilized for it. Collaboration and exchange of experiences between countries of the South was also called for. Burkina Faso expressed interests in exchanges with Bangladesh within the context of the LACC project described above. There already exists collaboration between Bangladesh and Vietnam and many lessons shared on such issues as flood and saline tolerant rice varieties. These would be pursued by Burkina Faso.

c) On Decentralisation

Much debate was generated on the urgent need for genuine decentralisation of power and responsibilities to regions. If local communities were to be empowered by them undertaking their own plans and using them, decentralisation was imperative. COP 15 in Copenhagen may have failed to gain consensus by state actors, but regions shared many ideas and scored many successes with project ideas drawn up. Many are already being implemented as regions require less rigid procedures to act. This all goes toward the need for decentralisation.

A clear position was advocated: decentralisation is a reality taking place in many countries and cannot be reversed. It has to be development based and built on the concept of subsidiarity with strict adherence to this. Transfer of skills and other resources to regions cannot be reversed but must increase in its pace with clear focus on promoting relevant and appropriate action toward the goal of decentralisation. It was

generally agreed that decentralisation is about power being taken away from the central state. Such power must be snatched from the centre and cannot be negotiated. Such move would promote sustainably the role of regions in food security and other development issues.

III. RECOMMENDATIONS

The group made the following recommendations for presentation to plenary:

1. Challenges of climate change and food security are many. The pressure is rising very fast. But these challenges present with them many opportunities for intervention, actions and sharing experiences. Such experiences are many in Africa. Agriculture is a source of climate change but is also part of solutions through mitigation and adaptations. Regions are taking many concrete steps to demonstrate this.
2. Regions are the right level for action. They are closest to the communities. They know very well the local stakeholders and actors. Regions are the proper geographical spaces for management of natural resources and dealing with climate changes within specific agro-ecological zones.
3. In this context, the action of regions shall be based on a territorial approach to rural development which means full participation of all stakeholders and the integration of various types of activities.
4. This requires adequate decentralisation and planning process in order to provide the regions with adequate means and resources to implement regional plans of action, complementary to national and international ones.
5. Regions are already engaged in concrete and innovative programmes such as zero carbon emission territories, preparedness for disaster risk management and payment for environmental services. In the future, regions should continue implementing concrete projects, exchanging experiences, research and expertise through decentralised cooperation and mobilize resources needed for this.