Agriculture is the main livelihood in many developing countries, especially in Africa. Agriculture is also one of the most vulnerable to climate change sector, as the last affects all factors and resources required for ensuring proper practice, with particular acuity in sub-Saharan Africa. Water resources, land degradation, desertification, land tenure and seeds access rights… climate collectively captures all farming difficulties and forces farmers and societies to adapt.

I - WHERE ARE WE?

- Recapitulation of previous work of the Agriculture and Food coalition

During the World Climate Chance Summit 2016 in Nantes, the Agriculture and Food Coalition had laid down the principle that it is not possible to consider agricultural issues without thinking about the food security concept. This cross-cutting issue, which affects both rural and urban population, must be approached from a territorial perspective and according to the realities of the scales. We should also reconsider the means we use to ensure food security. Indeed, agriculture is incredibly complex domain to address. For example, access to land is equally question of the rights of indigenous peoples as well as the question of gender equality. Agriculture is incredibly composite domain and touches multiple sectors therefore it should involve participation of multiple actors to assure its sustainable advancement. Following this logic, the territorial approach remains the only way to develop sustainable agriculture.

- In Africa, prevalence of family farming

Agriculture is a central element of the West African economy, accounting for 30 to 50% of GDP depending on the country and constitutes the largest source of income and livelihood for 70 to 80% of the population. Family farming, according to the Centre for International Cooperation in Agricultural Research for Development (CIRAD), accounts for over 50% of the assets of the African continent. As already noted by the Agriculture coalition (Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest (ROPPA) and The United Regions Organization / Forum of Regional Governments and Global Associations of Regions (ORU-FOGAR)) at the Climate & Territories Summit (Lyon July 2015), "family farming has already shown its benefits in terms of poverty reduction and food security, but also in terms of environmental protection, energy efficiency and the creation / maintenance of socially responsible jobs". In addition, for several years now, FAO reports have emphasized the need to valorise and preserve traditional products from family farming.

As Mr. Aurélien Alain Godefroy and Mr. Ayi LAKOUSSAN, of the Network of Peasant Organizations and Agricultural Producers of West Africa - ROPPA, recalled during the exchanges: “Today, 90% of West Africa's agricultural production is from family farming, but it is extremely vulnerable to climate change. There is therefore a huge challenge to overcome in order to feed the population in a
sustainable way in a context of sharply increasing African demographics. The challenge is to feed in a sustainable way in quality and quantity. ROPPA also recalled that "the transformation and transition to sustainable agriculture must be ensured by agroecology and this to claim food in order to claim food security or even the sovereignty of our countries". It is therefore necessary to increase productivity in a responsible way to achieve food and nutritional security and even food sovereignty. It should be recalled that land governance, training, and food security are are objectives of the United Nations' sustainable development agenda.

- But public subsidies for agriculture support are insufficient.

In Africa, the environment is still generally not conducive to the development of agri-food sectors, due to low public support expenditure and a high dependence on external aid from some countries. In Africa, between 1980 and 2016, support expenditure grew at half the rate of agricultural value added. So structuring investments should be a priority in the agricultural sector, subsidies remain mainly (1/3) dedicated to inputs (especially fertilizers). Changes in agriculture in Africa are already underway due to the effects of climate change. Thus, adaptation to climate change also needs to be massively financed and this financing should be accessible to farmers' organizations in particular.

- Land degradation and desertification phenomena are increasing.

The Agriculture and Food coalition has already insisted on this point at the World Climate Chance Summit 2016 in Nantes, saying that: "the restoration of degraded soils is one of the keys to mitigation and adaptation". This is particularly important in the context of the African continent.

- Success stories in this complex context.

The first example of success story was presented by FNGM network Burkina Faso. It is a farmers' organization created in 1967, whose philosophy is to "develop without damaging". The climatic realities of the northern region, bordering the Sahel, have pushed farmers reclaim degraded land through watershed management as well as through the agroecological techniques now widespread in the country: half-moons, zai, stony cords. As a result, 100 hectares have been recovered and this number is continuing to grow today. The network brings together 90 unions all over Burkina Faso. However, the network is blocked by the challenges of extension and scale up due to lack of resources.

Another example of positive change presented during workshop, discussed the input given by the multiplication of cooperatives, especially female ones, such as women's resilience program. This programme allowed to recover 9 hectares of land for women in 3 villages. The programme aims to reduce the workload of these women but also to reduce energy consumption, closely linked to their financial means, by working on their energy autonomy. As the region suffers from rural exoduses of young people and men, women are deprived of land to farm. The programme makes it possible to reduce women's workload and to secure their situations, especially in terms of their gender equality, as well as to rationalize the use of resources like water in a sustainable way.

The example of the initiatives that are directed to and based on youth participation was mentioned by Central African Youth Network on Water and Climate. This network's activity addresses the question "where does youth want to go?". In particular, this network has made it possible to set up drip irrigation systems in Burkina Faso, which are easy to manage, inexpensive and allow to double productivity. However, the doubling of yields raises the question of the saturation of the market and thus the disappearance of room for farmers, which forces the latter to undertake extreme measures.
For example, in northern Cameroon, around the Lake Chad, there is ongoing process of desertification. Agricultural practices employed there are traditional. As a result, the situation is aggravated. However, as was mentioned by Central African Youth Network on Water and Climate during the workshop: "It is not a question of bad will of the farmers, they are looking for ways to adapt but too few organizations are investing. It is necessary to train the young people explaining that the production via the agroecology is profitable. But there is still important work to be done: market research".

- Training opportunities.

In terms of training opportunities in the region, the situation is improving. For example: ROPPA is in possession of 2 international agro ecological centers formed by relay farmers, 11 pedagogical modules of agro forestry through family farming. At the regional level, within The Programme for the Promotion of Family Farming in West Africa (PAFAO), which has been jointly supported since 2009 by the Fondation of France and the French Committee for International Solidarity (CFSI), there have been reached 4 main results: setting up of farmer agriculture, creation of 3 national farmer organizations, introduction of 14 capitalization sheets (in Burkina Faso for example, fact sheet on farmers' seeds, in Mali: women's empowerment).

Today ROPPA is changing the situation in West Africa, whose agriculture in recent decades has been based on inputs and cotton. Agro-ecology has not gained ground yet, but we are responding to the fundamental problem of quality and quantity. Our difficulties lie in having sufficient influence on agricultural policies at all levels.

As been noted by Caroline Piquet of AFD, there are numerous interesting initiatives with good results on the ground, which, however, needs improvement either in the domain of communication (which is primordial in this sector) or urges for Improvement in particular in amplification and replication of the activities' scale.

- Agroecology, credible alternative in Africa

As was already noted in the founding text of the Agriculture coalition, it is equally important in the context of African development to foster sustainable agricultural models, such as agroecology and sustainable aquaculture, which are less consuming in fossil energy and inputs (unlike industrialized and intensive agriculture that consumes a lot of energy for mechanization, fertilizers and pesticides), while improving soil fertility and carbon storage.

Examples given in the workshop:
- 2 farmer agro ecological centers: Niélény's 11 training modules
- Niger's agroecological techniques
- Inter networks - 3 practical OP territories
- ROPPA - 14 experience sheets in 3 countries / rice fertilization / farmer seeds / water and soil conservation / empowering rural women
- ROPPA / Alliance for the Farmer Agroecology Coalition IPES Food and other NGOs

- Smart agriculture in Africa

During the workshop, 3 pillars of smart agriculture has been marked as paramount: increased productivity / adaptation / mitigation. Federica Matteoli – FAO presented an initiative supported by FAO, namely - Global Alliance for Climate-Smart Agriculture (GACSA). Today this alliance brings together 2,500 people from more than 200 member organizations, including around 50 African members.
Examples of success provided by Tosi Mpanu Mpanu, Board Member of the Green Fund: “In the margins of COP21, two African smart agriculture initiatives were launched: the first – on renewable energy and the second – on adaptation”. This has motivated the countries of the North to support these initiatives (10,000 megawatts for 2020 for example for energy), and to gather bring financial support up to 10 billion Euros, in order to mechanize and “modernize” Africa’s agriculture. In Kenya, for example, farmers have access to information by SMS, which alerts them on the rainfall or on the price of food on the markets. This is how technology can accompany farming practices.

II - WHERE DO WE WANT TO GO?

Towards changing practices: waste management, water management, soil and degraded land restoration, circular economy, etc. Many challenges for African continent, some of which were explored during the workshop.

- Importance of the territorial approach and the link between urban and rural areas

This aspect was already present in the document of the coalition at the end of the Lyon Summit (2015), it is essential to “encourage the development of territorialized chains that limit energy consumption for the transport of agricultural products, and that contribute to creating added value and jobs that respect social criteria”.

An example of good practice was presented at the workshops on this subject. Ana Puhač introduced the Eating City network. Network initiated by the private sector, created on the basis of the participation of young people, on the structuring of family farming through entrepreneurship. This example highlights the fact that it is strategic, especially in the African context, which is to work better on the link between urban and rural areas, on the issue of nutrition and the environment. As such, Eating City organizes summer camps to promote the importance of the impacts of climate change in various sectors, especially with food and nutrition, while bringing together the various actors of the organization. The aim is to speak with one voice and to mobilize young people focusing mainly on the Mediterranean region. It has particular importance, as the Mediterranean region a food hub is currently being designed and it will give rise to international exchanges.

- Waste management

Recycling, composting, sorting, waste management covers a wide range of activities. Example presented by Paul Amicha, the man who prepared an advocacy document for the Ivorian municipalities based on a circular economic model on waste recovery. Basing on the TSONGAI model in Benin, Mr. Amicha adapted it to the scale of a Ivorian municipality, in attempt to answer the question “how can the waste flow become an energy flow?”. This problem is particularly relevant for Ivory Coast, given that production every 2 million tons of cocoa beans leaves from 8 to 10 million tons of waste. We have to return to the natural cycle model, enriching our soils with “waste”, since it is the cycle of life: the leaves of a tree once fallen become its humus. We have to return to some traditional practices such as fallow, crop rotation, etc., and to go further, with the possible improvements that biotechnology brings. “It’s not a step back, it’s an innovation based on ancestral foundations”.

- Structuring sustainable sectors

To facilitate the involvement and support of local actors and in particular small associations involved in a local territory who have a refined knowledge of their territories and are levers that can be used to
mobilize young people, particularly with regard to initiatives such as the sharing of practices, training/transmission and advocacy. It is necessary to mobilize public authorities, and especially local and regional authorities, in particular through multi-stakeholder projects.

Example presented: RICE. Since 2009, it has managed to group 160 cooperatives, which represent 12 000 producers. In 2011, RICE organized several exchange workshops on issues such as climate change, adoption of agro-ecology, and other related subjects. RICE has launched a pilot project on 5 cooperatives that pursues the objectives of diversification and improvement of soil fertility, as well as valorization of natural animal waste. Once the project is finished, final assessment will be conducted, in order to capitalize on the impacts of the different systems set up during the project, and then to disseminate the results within the cooperative network.

III - HOW TO GET THERE?

It is necessary to be realistic about the capacity of the actors to be mobilized in collective efforts, without a leader dedicating 100% of his/her time. The Climate Chance Association cannot provide a full-time human resource and relies on the actors involved in the coalition.

As such, it is proposed to initially target only two or three initiatives, which are to be included in the 2018/2019 roadmap in order to be realistic and to be able to measure progress.

- Mapping

We propose that the members of the coalition continuously carry out a mapping of interesting actors, good practices and projects that have a particular impact and can be replicated on a large scale.

Coalition members will be able to communicate this information to the Climate Chance Association, which will highlight them in its Climate Action Portal, its Library of thematic documentary resources and its Observatory’s annual report.

- Dissemination of information

To facilitate communication, a mailing group agriculture-alimentation-reforestation.At@climate-chance.org was created in order to encourage exchanges between actors who participated in the workshop. It will gradually accommodate new members. This is not necessarily the final tool, and a discussion will be conducted to determine which collaborative tool could be the most effective in the context of a multi-stakeholder approach in Africa.

A mailing list will allow to share all relevant information in the sector, such as: funding opportunities, calls for projects, training opportunities, interesting events, etc. It will be able to gradually welcome new members on request to the Climate Chance association team.

A mailing list that can be organized in the medium term by theme, monthly or every two months, or on successive issues. There is possibility to organize online discussion on specific issues. An advocacy aspect should be kept in relation to INDCs. Call for volunteers on the themes + shared agenda with information on national/regional/international meetings.

Proposed topics for discussion:

- Training
- Sustainable economic sectors compatible with climate change
- Investments in agro-ecological transition
- Reforestation and protection of resources
- Land governance

- Common agenda
  Define the common agenda of the coalition, the next steps to evaluate the progress made, the next events to meet or present progress, etc.

  1. To go further... Ideas for medium- and long-term activities, if the coalition succeeds in acquiring a position to lead it

- Training
  Integrate training / capacity building into projects: actors (producers / local elected officials / citizens via popular education (eg Leo Lagrange) / also based on training centers / schools on agroecology for example.

Incentive tools for farmers to inform them about the benefits of Agroecology.

- Articulation of the actors
  Social movements, politics, civil society, private, academic, etc. Articulation using a mechanism that provides coordination: we must influence the National Determined Contribution (NDC), which remains the best way and tool to bring together actors.

  On the sector approach: work on sharing between actors, multidimensional and multisectoral.

  Capitalization, dissemination, pooling, inter-federation, alliance and networking of actors in taking into account their diversity. Dialogue at sub-regional level, ECOWAS, African Union.

- Accompanying actors

  - Structuring sustainable sectors: Integrate the lessons of workshop 10 on sustainable value chains here, which is to be merged into this coalition.

  - Land restoration: reforestation of endangered trees / Fertilization of soils / Soil fixation

  - Structuring women's associations or cooperatives

  - Land governance, including enhancing equal access to land for women and men.

  - Support access to financing and co-financing: share information on African initiatives or existing funds to propose joint multi-stakeholder projects:

    Establishment of the closer cooperation with the ADB on renewable energy initiative / green funds / with AFD / trust fund Sahel European Union / G5 Sahel Initiative / Soil Neutrality Fund = MILORA with the European Investment Bank / IFAD / FAO / UNDCC.

The coalition supporting this roadmap is co-managed by the following organizations:

ARF, AVSF, Eating City, Let’s Food Cities, ROPPA, REFACC
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