



SMALL FARMING: BARRIER TO SUSTAINABLE AGRICULTURE OR AN ALTERNATIVE SOLUTION?

It has been recently argued whether small-scale farming is a feature of an underdeveloped society that has no means to improve its infrastructure or it represents a tool to accomplish sustainable land use that benefits the society both satisfying nutritive and environmental needs. This form of traditional local knowledge usually dates back in the past, does not entirely rely on technology and it has no imperative of obtaining profit, but mainly to provide subsistence to the individual households and to support fulfillment of community social obligations. By not aiming to produce more than is necessary, it poses low risk to depleting the natural resources and disrupting natural cycles. On the other hand, as the production serves mainly to sustain the households, there are fewer opportunities for participation in the agricultural markets, which is being observed as one of the main critique to small-scale farms.



From one side, this could mean that the producing household is completely dependent on the natural conditions and the seasonal outputs. However, no involvement in the markets makes the households independent of the fluctuations in the supply and demand and pre-assigned values to different produces. Some research shows that due to the need for food security and financial stability the increased reliance on subsistence-style agriculture could contribute to making the population less vulnerable to macroeconomic shocks in the future.

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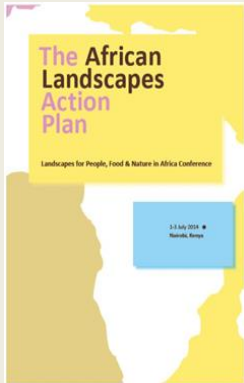
Apart from the natural, financial and human capital, subsistence agriculture characterizes a distinct social element as well due to its cultural embeddedness. The individual farmers often form producer groups and farmer cooperatives that have potential to hold a primary role in enabling the members of their communities to take active part in the development of subsistence agriculture. The reality shows very few take part in supplying inputs and even fewer have influence on national policies or decision-making¹. Nevertheless, small-scale farms could be enforced as more acceptable and profitable by ensuring that the international and national policies acknowledge their value and by forming institutional frameworks to support alternative farm growth strategies, aside from the more Western model of individual corporate farm expansion.

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LANDSCAPE APPROACH AND SUSTAINABLE LAND MANAGEMENT IN AFRICA

There is an increasing acceptance that sectorial approaches to land management are no longer sufficient to meet global challenges such as poverty alleviation, biodiversity conservation, and food production. The pressing challenge of integrated landscape management is to link agricultural practices, institutions and policies with other landscape-scale activities.

In December 2014 in Lima, the Global Landscape forum created a platform for positioning landscapes in the new international agreements.



The event dealt with key issues concerning farms, forests, water bodies and settlements, which are not isolated elements but part of a wider landscape in which all land uses are integrated. A landscapes approach entails viewing and managing multiple land uses in an integrated manner, considering both the natural environment and the human systems that depend on it.

This approach allows stakeholders to identify policy options, investment opportunities and research priorities by:

- Integrating policies across sectors and understanding how land-use choices in one area affect other areas
- Negotiating competing demands for land uses in a given landscape
- Assessing all factors that affect land uses, whether at local, national, regional or global levels
- Recognizing changes in landscapes as migration, urbanization, external shocks, and production and consumption patterns shape decisions on land use
- Valuing the role of all the people in the landscape and studying how groups benefit differently from land uses.
- Leveraging private and public capital for sustainable development in the landscape.

Recent meetings held in Africa related to sustainable land management and the Great Green Wall led by TerrAfrica bring often the issue on the agenda based on the Africa Landscapes Action Plan, supported by the NEPAD. It is an ambitious plan that spells out priority actions that embrace all actors, extends to all sectors and integrates policies and services. The Africa landscape action plan commits partners to change policies, build institutions, develop business plans, balance power dynamics and develop technologies that together will bring concrete, sustainable solutions.

LAND RIGHTS ARE HUMAN RIGHTS

Landlessness is a major reason of rural poverty in the world. Up to one quarter of the world's population is estimated to be landless, including 200 million people living in rural areas, and approximately 75% of the world's population living in extreme poverty (less than \$1/day) live in rural areas.

According to the Food and Agriculture Agency (FAO), "rural landlessness is often the best predictor of poverty and hunger." There are enough evidence which suggests that secure and legal access to land is one of the effective way of alleviating rural poverty and food security. Land is most dependable source of livelihood for farming and pastoralist communities.

However there are millions of families who work on land as share croppers and landless labor, who could hardly earn their livelihood. Land for them is an important asset and social status. Land is a way to social justice, in a society which was segregated on hierarchical values and where women were not even considered as equal human being. Hence it was important to take the land beyond just means for welfare.



There is a universal principle "land to the tiller" or "who till will eat from land". Land rights are human rights, as right to food, livelihood and respectable life. Peasant families and agricultural labor deserve to have a secure access to land resources, so they can invest on it on long term basis and take care of it in sustainable way.

In societies dominated by feudalism, poor strata of comprising on peasants and agri-labors cannot come out of abject poverty, as feudalism holds its clutches on political and administrative power. In some countries, like Pakistan, feudalism is very strong and in Sindh province particularly a brutal dominance in the governance, where most of the peasants are leading a life of modern slavery, as they are kept bonded on large agricultural farms.

The UN Convention to Combat Desertification (UNCCD) is all about restoration of degraded lands to sustain human food security and wellbeing. However the objectives of UNCCD cannot be achieved until land users are not involved in land management, because land users' communities will not take care of land until they don't have access to it on long term basis.

They debate at UNCCD, has so far on technical aspects of combating desertification, however a very little is said or committed on land governance. Tenancy and land and agrarian reforms can pave way for responsible land management. Farmers and pastoral communities will take care of farm land, rangelands and forests when they will be given legal titles, ownership of secure tenancy rights. UNCCD is in excellent position to initiate this debate and ask its member countries in Asia, Africa and Latin America to take meaningful initiatives on land and agrarian reforms as a tool of sustainable land management.

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AGROECOLOGY AS A TOOL FOR COMBATING LANDDEGRADATION AND DESERTIFICATION: BRIDGING THE GAP FROM SINGLE FARM PRACTICES TO A LANDSCAPE SCALE

The French working group desertification composed by CSOs and researchers, has initiated a work on scaling up agroecology at the level of a territory. The first results invites to change the scale by the dissemination off a model and by designing another approach of agricultural landscape development. Agroecology approaches are often considered useful in combating desertification. One of the unresolved issues is how to accompany the upscaling to vast territories or to entire countries. This change of scale is key for any expectation to effectively address the problem of land degradation and combating desertification in its full dimension. The group initiated a working issue on "Territories and Agroecology" in order to suggest ways to support the now newly recognized need for an agro-ecological transition. The objective is to provide foundations and guidelines to such a transition at a fixed territory scale.

Designing the agroecological transition across a territory can be approached in two ways. The first, used by many development stakeholders, involves the dissemination of a farming model based on the principles of agroecology. Relying on the effects of the multiplication of individual experiences from pilots, this approach has the merit of simplicity and some operational efficiency. However, the lack of connection among these many individual existing initiatives does not constitute a critical mass capable of weighting to an agroecological transition of a landscape. Thus we are exploring another way of understanding the agro-ecological transition to a regional scale.

Design of agricultural development of the territory (seen as a system) should be changed based on the principles of agroecology. The upscaling is based on ecological and socio-economic paths that are common to the stakeholders identified in the territory.



Before agroecology is used as a tool for territorial development in areas subject to desertification several conditions must be met. First the scale to be considered should be set accurately: at the confluence of biophysical and socio-economic dimensions, the territory in which we seek to build the agro-ecological transition involves a complex articulation among different scales. Secondly the identification of the stakeholders, the territorial organizations and their interactions, should allow at first to highlight the synergies. And combine skills and cross-cutting means at the service of agroecological land development. The next step is to understand how to integrate the elements into a territorial dimension.

The following guidelines are encouraged: use local expertise, have a dynamic and evolving vision on natural resources, understanding the organization of space, characterize the production, identify interactions between livestock and agriculture, characterize the vulnerability of local systems.

Driving agroecological transition needs innovative approaches and project tools able to generate interest from both farmers and decision makers. Governance for collective decision making is key. Finally, agro-ecological production should be combined with structured and income generating value chains, while mobilizing "research" to support the transition and allow multi-criteria evaluation. The report will be available in June 2015.

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FOREST CARBON IN DRYLANDS. AN EXPERIENCE IN SANTIAGO DEL ESTERO ARGENTINA

Since 2006 several governmental and non-governmental institutions in Santiago del Estero, Argentina, have been developing a process of building new knowledge related to forest carbon in drylands addressing topics related to emissions from deforestation, as well as carbon sequestration in forests and soils through development of agroforestry and afforestation with native species. In this regard, methodologies for calculating carbon afforestation, forests, and soil in drylands have been designed so as to analyze the policy and the necessary knowledge to promote sustainable practices, which allow stakeholders to access land and new benefits based on the valuation of environmental services in drylands.



The aim is not only to meet and develop the method of checking quantities of carbon in soil or biomass, but rather to identify recognized carbon sequestration practices, which could be incorporated into a future carbon market for drylands.

We established an interdisciplinary technical team composed of agronomists, forestry engineers, economists, sociologists, lawyers and communicators each one providing support in their area of expertise.

The activities were implemented under public private agreements between local, national and international scientific institutions; Provincial and national governmental and non-governmental organizations, to provide a strong interagency group aimed at establishing a process to manage a system of monitoring emissions and capture measurable, reportable and verifiable greenhouse gases and to identify, certify and supervise recognized agroforestry practices of carbon sequestration.

The project brought the following results:

- Design and development of a methodology for carbon sequestration, approved by the Board of the CDM of the UNFCCC. AR-AM0012 Afforestation or reforestation of degraded or abandoned agricultural lands
- - 2,013 hectares were reforested with native species (*Prosopis alba*) in degraded drylands
- - Identification of estimates of carbon for different soil and forest types and installation of monitors to measure the carbon in different agroforestry practices in drylands
- - Establishment of an expert database for calculating the carbon stocks in forests and soil in the country and in the LAC region.
- - Preparation of economic studies to assess the opportunity cost of drylands in the province, in order to know economic values of a potential carbon market.
- - Analysis of the current regulations and regulatory gaps for the implementation of a Forest Carbon Strategy in the Province.
- - Establishment of pilot sites in the Province for the implementation of agroforestry practices.
- - Training of 86 small farmers in sustainable development practices to improve the stock of carbon in the soil and forest.
- - Elaboration of the first maps of historical forest cover loss in the province from 1990 to 2012.

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CALENDAR OF EVENTS (March-June)

25-27 March- 13th session of the Committee for the Review of the Implementation of the Convention, Bonn, Germany

1-11 June - Bonn Climate Conference, Bonn, Germany

10-13 June - DesertifActions 2015, Montpellier, France

17 June - World Day to Combat Desertification Worldwide