

Experiences from Niger and Malawi: Young people as catalysts

Youth has been placed at the centre of agricultural innovation systems approaches in two initiatives in Niger and Malawi. In both research projects, scholarships were given to students to work with local communities to solve problems of their interest. This interactive approach allows for activating the rural population in close relationship to the young researchers.

Innovation is seen as initiatives enabling technical, organisational, institutional, political and/or economic improvements. Innovation is context-specific: what is considered new in one area need not necessarily be an innovation in another part of a country or the world. An innovation systems perspective allows an analysis of pathways of change and also enables an understanding of the interactions between various actors. In the 1990s, this favoured the introduction of various participatory research tools to consult beneficiaries about their needs and to make use of local knowledge through interactive learning, exchange of information and negotiation in the joint analysis, planning, implementation and evaluation of activities. Thus, rural people are now no longer passive users of knowledge developed elsewhere but active partners whose innovations and initiatives are fully recognised.

From 2003 to 2007, the African Network for Agriculture, Agroforestry and Natural Resources Education (ANAFE), which is a decentralised pan-African network of agricultural colleges and universities, was involved in two innovative research projects in Western and Southern Africa.

In these projects, scholarships were given to competitively selected BSc and MSc students to work with local communities in solving issues of particular interest to them. The originality of these projects lies not in the research topics treated by the youth, but in the innovation systems approaches used which gave the students and their university supervisors hands-on practice and experience with new ways of partnering and working with rural communities.

■ The targeted Inter-University Project in Niger

In order to overcome the failure of many rural development projects that were operating in the south-eastern part of Niger from 1980 to 1999, a new project called PPILDA (Project for the Promotion of Local Initiatives for Agricultural Development) was developed with the financial support of the Government of Italy. The PPILDA project initiated the PIIP (Promotion of Farmers' Initiatives and Innovations) approach, which is a new way of supporting the participation of all actors in agricultural research and development. This new approach is based on two pillars:

Partnership building between rural people, students and the PPILDA project for the implementation of the PIIP approach in Aguié, Niger.

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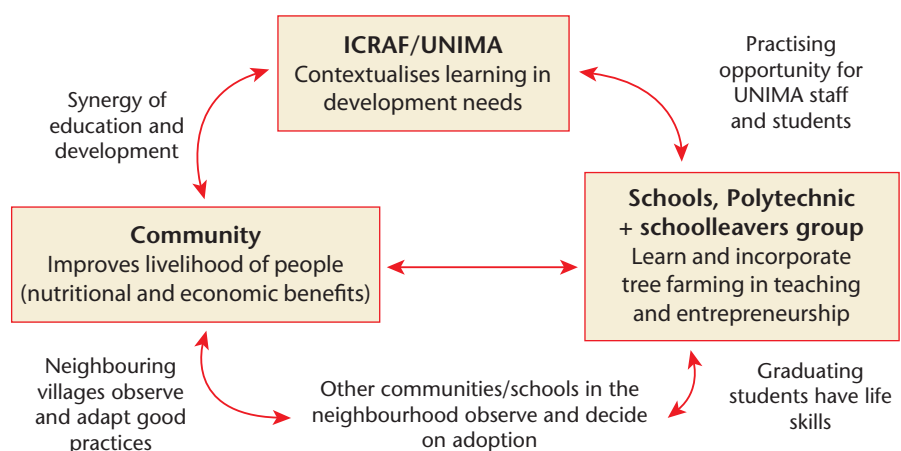
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Photo: ANAFE

Southern Africa Farmer Learning Resource Centre Model showing interactions between partners



Source: ANAFE

1. Partnership: the principle is that all partners possess some knowledge and know-how that is complementary to and necessary for the development of rural innovations. Partnership strengthening passes through interactive reflection and joint actions.

2. Experimentation: Experimentation is a way of testing farmers' ideas in order to jointly evaluate the quality of the idea. In this regard, nothing is definitely fixed but ideas rather evolve constantly to adapt to the context.

In 2001, the Faculty of Agriculture of the Abdou Moumouni University (UAM) of Niamey and the National Agricultural Research Institute of Niger (INRAN) were invited by the PPILDA project team to be the research and education partners of the project. In 2002, the UAM Faculty of Agriculture signed an interuniversity partnership with three Belgian universities, namely the Catholic University of Leuven, the Agricultural University of Gembloux and the University of Arlon, and with a Belgian NGO called ENDA Inter Monde to work with the PPILDA on "Consolidating the relationship between university, research and development activities through reinforcing the synergies between scientific and rural knowledge". From 2003 to 2006, 20 students from Niger (6 MSc and 14 BSc) and 6 MSc students from Belgium

were financed for one to three months' research in the project villages in Aguié, 750 kilometres southeast of the capital Niamey. All students were supervised by lecturers from Niger and Belgium.

■ PIIP Methodology for conducting students' field work

The research topics are related to Agroforestry, Agriculture, Animal Production, Soil Sciences, Integrated Pest Management and Economic and Social Sciences, and followed the stages described below:

1. The "idea of research" is expressed by the population to test some of their initiatives or innovations. Other research topics are brought in by the PPILDA project team itself.
2. Terms of reference (TOR) clearly define the objectives and expected outputs so that the students and their supervisors are focused on the real expectations of the local people. The TORs having been accepted by the university partners, a tripartite contract is signed between the project, the village leaders and the universities.
3. Research protocols by the students take into account the various social groups present in each village.
4. All students and research or education partners must first develop a

good grasp of the principles and methodology of the PIIP approach, which is based on the "village centrality", that is, full ownership and involvement of the population.

5. Evaluation of the research topic and methodology together with the local people at the beginning allows for the research activities to be a dynamic process with constant readjustment.
6. Research conducted on the basis of a methodological guide makes the results more relevant to the local people's needs and expectations.
7. Periodical restitution of students' work progress is done at the project, village and university levels.
8. A final restitution of results is done by each student in the villages before the defence of the BSc or the MSc thesis. Stakeholders attending the final restitution include all social groups from the village and the neighbouring villages. The objective of this final restitution is to evaluate the information and results obtained by the students and discuss options for the implementation of recommended actions.

■ The Farmer Learning Resource Centres in Malawi

ANAFE in partnership with the World Agroforestry Centre (ICRAF) has been establishing Farmer Learning Resource Centres (FLRCs) in different African countries to facilitate the scaling-up of Agroforestry practice and its adoption at the grassroots level. This is against a background of limited extension support, limited land resources, escalating fertiliser and livestock feed prices and worsening poverty in most sub-Saharan African (SSA) countries as well as increased school dropout rates. The FLRC can serve as a conduit by which developed technologies and information emanating from research is packaged and used in capacity building at schools and at the grassroots level.

The major objective of the project was to establish FLRCs in schools to equip learners with “life skills” and demonstrate relevant Agroforestry technologies to the communities in and around the centre. The specific objectives were to:

- share innovations through simple and friendly delivery mechanisms within the farming environment,
- improve the effectiveness and relevance of tertiary education through experiential learning with farmers, and
- establish the possible role of schools as an extension model.

Schools were chosen to host the FLRCs for two reasons. Schools have the mandate to guide young people towards maturity and therefore can play an important role in promoting learning about agricultural production, nutrition and entrepreneurship skills. They can also serve as a channel for community participation and can provide cost-effective food and nutrition interventions. With the HIV/AIDS scourge ravaging the SSA subcontinent, running FLRCs in schools can compensate for the loss in transfer of “life skills” from parents to children due to the impact of HIV/AIDS. This will also help prepare children to head households when they are adults.

Methodology. Two primary schools and a village polytechnic were selected to host the resource centres around Zomba, Malawi. An Association of School Leavers Development Initiative

Lessons learned

The two experiences presented here show the potential of the rural innovation and innovation systems approach in solving real development needs in Africa. Involving youth and placing them at the centre of the innovation systems approach increases their technical and soft skills and makes them highly competitive on the labour market. All six MSc students and one third of the BSc students who did their field work in Aguié were taken on by the PPILDA project and by other rural development projects in Niger within one year after graduation.

In Malawi, the association formed of school leavers was able to generate income for the initiators and the partners. However, the two projects showed that in order to institutionalise the innovation systems approaches into a framework for promotion of national development, African governments need to reform their agricultural systems to make them more relevant. The role of State development agents needs to be revised to be more service-oriented.

(ASLDI) group in Zomba town was also integrated. Chancellor College of the University of Malawi (UNIMA), ICRAF, Makoka and villages in the vicinity of the schools participated in the project as shown in the Figure on p. 15. Three activities were started at the FLRCs:

1. value-adding and marketing of fruits, starting with mangoes;
2. planting passion fruit and grafted mangoes for juice and jam production and
3. mixed Gliricidia/maize intercropping.

The principle of the model, which took inspiration from a FAO (2002) strategy for the establishment of a school garden, is as follows: The FLRC is established at the school or polytechnic, and the school leavers group establish a place of work. World Agroforestry Centre scientists train the students on the technologies, and in turn

the students establish the orchard and are trained in value addition methods. Field days are arranged for the communities to see the on-going activities. Local leaders and political leaders are also invited. The communities observe and decide on adopting the methods. If they need further training, this is provided by ANAFE and ICRAF. The University of Malawi (UNIMA through Chancellor College) is involved in providing MSc students to study the process of school-community links and how this can be used as an extension model. Learning is also contextualised in development needs. The schools and communities provide appropriate opportunities for university students to practise. Graduating students from the schools have life skills, and by applying what they have learnt at school in their home villages, they serve as a model for other communities, thus establishing the multiplier effect.

Zusammenfassung

Der Beitrag beschreibt zwei innovative Initiativen in Niger (Westafrika) und Malawi (Südafrika), bei denen die Jugend im Mittelpunkt von Ansätzen zu landwirtschaftlichen Innovationssystemen stand. Das von einem ländlichen Entwicklungsprojekt in Aguié (Niger) entwickelte PIIP-Konzept wurde zu einem partnerschaftlichen Rahmenwerk für den Wissensaustausch zwischen der lokalen Bevölkerung, die vom PPILDA-Projekt (Project for the Promotion of Local Initiatives for Agricultural Development) unterstützt wird, einerseits und Studenten und ihren akademischen Betreuern andererseits. Die

Initiative in Malawi, die sich auf eine landwirtschaftliche Bildungseinrichtung stützte, ermöglichte den Aufbau einer Partnerschaft von Studenten und ihren Betreuern mit Grund- und Sekundarschulen. Ziel war es, zur Armutsminderung und Einkommenserwirtschaftung beizutragen.

Resumen

El artículo describe dos iniciativas innovadoras en Níger (África Occidental) y Malawi (África Meridional), en las que se desarrollaron sistemas de innovación agrícola con un enfoque centrado en los jóvenes. El primero, que se conoce como

PIIP y es implementado por un proyecto de desarrollo rural en Aguié (Níger), se ha convertido en un marco de cooperación para el intercambio de información entre poblaciones locales respaldadas por el proyecto PPILDA, los estudiantes y sus supervisores académicos. La iniciativa de Malawi se ha basado en un centro de recursos de aprendizaje agrícola. Ha permitido reunir a estudiantes universitarios y sus supervisores con escuelas primarias y secundarias, incluyendo los graduados de estas escuelas. Se trataba de establecer una cooperación para el alivio de la pobreza y la generación de ingresos.