Research Application Summary

Scaling up innovation platform approach implementation in Rwanda

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Abstract	The adoption of innovation platform approach is gaining credence in the Districts of Rwanda. This paper gives a picture of the Platforms initiated by Rwanda Agricultural Board (RAB) in Kirehe, Bugesera, Nyamagabe and Muhanga Districts. It describes also other platforms supported by external RAB funded projects such as RAB/ASARECA Climate Change, RAB/AGROBIO/ASARECA, RAB/ASARECA/BXW and RAB/SIMLESA/ACIAR. Finaly it shows the platforms' establishment plan accross the country for banana, fish farming on Kivu Lake and beef cattle value-chains. The main challenges remain funding and limited number of social scientists capable to facilitate the work of the innovation platforms established. However, there is high political support for the approach and several projects intend to provide financial support for Iinnovation platforms (IPs).
Résumé	L'adoption de l'approche des plateformes d'innovations agricoles gagne du credit dans beaucoup de districts du Rwanda. Cet article donne une image des plateformes initiées par RAB dans les Districts de Kirehe, Bugesera, Nyamagabe et Muhanga. Il décrit aussi un bon nombre d'autres plateformes qui bénéficient des projets tels que RAB/ASARECA Climate Change, RAB/ AGROBIO/ASARECA, RAB/ASARECA/BXW et RAB/ SIMLESA/ACIAR. Finalement, un plan futur pour la mise en place d'autres platformes dans le pays est aussi presenté notamment pour la promotion de la banane, la pêche sur le Lac Kivu et la chaîne de production de la viande de boeuf. Les principaux defis restent le financement des activites prevues et le nombre limite de chercheurs en sciences sociales capables de renforcer les platformes initiees. Cependant, il y a dans le pays un soutien politique incomparable et beaucoup de projects veulent financer l'approche "Plateforme d'innovations".

Background

Dusengemungu, L. & Ndayisenga, P.

This paper highlights key results in the "Proof of the Innovation platform concept" and its contribution in different districts of Rwanda. The adoption of this approach is in line with Rwanda Government efforts to mitigate hunger and poverty. This approach operates at district level and puts the community with its stakeholders in the centre while creating profitable networks. It builds on the the maize platform which the principle author worked on as part of his MSc thesis at Makerere University reported on earlier (see Dusengemungu *et al.*, 2012, this volume) Since completing the MSc study, the first author has been appointed 'the head of Innovation platforms; he is now involved in setting up innovation platforms in different agro-ecological zones of Rwanda.

From January to October 2012, Innovation platform activities such as establishment, sensitisation meetings, Stakeholders' mapping, needs assessment, focus or entry point, launch meeting, development and implementation of action plans, and monitoring and evaluation were carried out in Kirehe, Bugesera, Nyamagabe and Muhanga Districts of Rwanda.



Rwanda map with focus on Innovation platforms for RAB priorities.

Innovation Platforms Initiated in Rwanda Kirehe district platforms. Three commodity value-chain platforms were established in Kirehe District: maize-beans, rice and coffee. Each Platfom has got a leading committee composed of five members elected from a wide range of stakeholders: farmers, farmer cooperatives, local leaders, researchers, extensionists, traders, credits services, districts officers, researchers and extensionists from RAB and NAEB, service providers and input supply (ENAS), MINAGRI projects (KWAMP, PRICE, PAPSTA) and NGOs in place. Based on main constraints identified in a participatory manner, each platform developped a specific action plan (Dusengemungu and Ndayisenga, 2012). The action plans for these Platforms include mainly: establishing linkage with cooperatives, markets and banks, seeds certification from RAB, driers and stores facilities to be constructed in different sectors, rice-marshlands to be managed, coffee washing stations' machines to be aquired, etc. Besides the involvement of local leaders, political support for the approach is high and several projects intend to provide financial support for IPs. The approach brought the key stakeholders together to address productivity, market, natural resource management, policy and their interface issues. However, a number key challenges remain including funding of the IPs activities (especially meetings and implementation of action plans). KWAMP project has accepted to provide about 10 million Rwandan francs to support the three platforms established in Kirehe, but funds have not yet been released. Currently stakeholders try to operate using their own means.

On the other hand, three external RAB funded projects are also working on platforms: RAB/ASARECA on climate change, SIMLESA/ACIAR, AGROBIO/ASARECA and ASARECA/ BXW/RAB Projects.

Bugesera and Kirehe districts platforms. The two platforms (Bugesera and Nyamagabe) were initiated in different agro-ecologies in February 2011 under Climate change Project of RAB/ASARECA and with a focus on water productivity for improved livelihoods. Activities had been long dormant due to lack of a scientist to facilitate the activities inspite of the project having received fund's release. The project has now been re-activated and community action plans developped for the two districts and researchers expect different results. Using a matrix ranking technique the following activities were chosen by stakeholders to ensure the water productivity for better crop

Dusengemungu, L. & Ndayisenga, P.

production and improvement of livelihood and income of beneficiaries: (1) Plantation of agroforestry trees (including nursery preparation), (2) Dam (farm ponds) construction -12 dams including rehabilitation of 4 existing dams, (3) Installation of roof rainwater harvesting systems, (4) Rehabilitation of drainage irrigation network system, and (5) Trials (with farmers in their plots) on plastic mulching technology. All the activities will be implemented during the period from July to December 2012. However activities 3, 4 and 5 will start after the purchase of materials / equipments concerned. The tender process for the purchase has started and is at its final stage. Implementation of the first two activities has started through existing cooperatives formed by farmers.

Muhanga district "Banana Innovation Platform". This platform was initiated by the Biotechnology/Tissue Culture Team and the head of Innovation platforms at RAB since september 2012. The project activities entitled: "Developing Community Based Low Cost Tissue culture Innovations for improved food security and livelihoods in the ECA" is funded by ASARECA and will establish also Solanum potato and sweet potato innovation platforms respectively in Gicumbi and Nyamagabe Districts. These sites are already organised around innovation platform and the approach will not be new to them. Furthermore, some already have infrastructures that will help this project, considering that the budget allocated and project period (October 1, 2012 -October 31, 2013) cannot allow effective establishment of new ones. The project will conduct mapping of actors; a baseline survey; production and dissemination of banana, potato and sweet potato clean planting materials; start generating low cost tissue culture innovations; establishment of a tissue culture incubation center; start training of value chain actors and technicians; develop a tissue culture information and communication plan and create awareness in low cost tissue culture innovations. According to the action plan, most of the activities will have been completed before June, 2013.

In Muhanga District, the Platform has brought together local leaders, farmers, cooperatives, researchers, nursery operators, extension agents, input and service providers, and market operators in a process of continuous communication and dialogue to analyze local challenges in the production and dissemination of low cost TC planting materials of banana (Dusengemungu, 2012). The establishment process of Muhanga platform had the following steps: (1) scientists'working session to better understand the Project, (2) sensitisation meeting with stakeholders, (3) sharing roles and responsibilities, and (4) making an action plan. The introductory meeting in Muhanga explained to stakeholders the Project to be implemented on **Low CostTissue culture Innovations.** The site selected covers two neighbouring villages, Gasharu and Kigarama located in Shyogwe sector where six farmers were selected to host **banana demonstration plots** and a **local banana nursery**. This ASARECA project aims to help farmers become entrepreneurs selling disease free banana plantlets to their peers in the surrounding villages of Muhanga and Ruhango districts. The next step will be to establish a Solanum potato IP in the North (Gicumbi District).

Fishing innovation platform in Kivu Lake. A fishing platform was started in January 2012 by RAB/Westen Zone. Five districts bordering Kivu lake are all participating in the platform activities. It has brought together traders, fishermen, the police and the army, district leaders, researchers, extension workers and drivers who ferry the fish to Kigali for sale, sellers, and consumers to agree on how to conserve fish on Lake Kivu which was getting extinct (Megan, 2012). Stakeholders agreed not to fish from the lake for two months once a year so as to restock the lake and thereafter, open it for fishing." At first it was like a -one time -off event, but this has been adopted as a more or less permanent measure to replenish the lake because the community has seen the benefit (ASARECA, 2012). On 2/ 10/2012 a platorm meeting was held in Karongi to open the lake which had been closed since 1 August to 30 september 2012 (MINAGRI, CICA, 2012). During this meeting, the two months quarantine was adopted for the future fishing activities in lake Kivu (August and September). A second mothly 'quarantine' was adopted, to harvest a particular fish species once a month during moon light period. Now Isambaza can be attraped during this short period of each month (12-15 days). Among key activities, the fishing IP has not only restocked fish in Kivu lake but also promoted intensive methods of Fish farming through training of farmers and artisans. This is the biggest platform in the country but will require more attention for sustainability.

RAB/SIMLESA Project activities on platforms are being planned for the near future. The establishment of the SIMLESA Maize-legumes based Innovation Platforms will be done in four districts following the plan below. SIMLESA

Other Emerging Platforms in Rwanda

Dusengemungu, L. & Ndayisenga, P.

Project activities planned for Rwanda include: (1) Protocals, (2) On –station trials, (3) Sites selection (4 districts, 2 in the south, 2 in the East), (4) Selection of 6 farmers on each sites, (5) Training of farmers, (6) Sites characterisation survey which has been completed (biophysical and socio- economics data have been collected), (7) Field days, and (8) Exchanges visits

RAB/ASARECA/BXW project/platforms in four districts.

This is a one year project aiming at scaling up and promoting Bacterial Xanthomonas Wilt (BXW) control technologies and innovations for sustainable productivity of the banana system in the project areas of Rwanda. Activities include (1) selecting sites for BXW control activities (North, West, East and Sourth) (2) mobilisation of surrounding communities for BXW control, (3) drawing up of action plans at each site with baseline survey, disease control activities, promotion and utilisation of clean banana planting material with mother gardens and nurseries, M&E and developping banana plantlets policy options. The targeted districts are Musanze (North), Karongi (West), Kirehe (East) and Gisagara (South).

More banana platforms to be established. The Banana program is committed to promote two Innovation Platforms in two zones: one in the East (Kirehe) and the other in the West (Rusizi, see Rwanda Map above). The head of the banana programme and technicians have prioritised these two IPs in their annual performance contract and the process of initiating the platform has already started in the West.

Beef cattle platform. An Innovation Platform on "Improving beef cattle productivity for enhanced Food security and Efficient Utilisation of natural resources in the Lake Victoria Basin" has been designed. This project will be implemented in Nyagatare and Kirehe districts with the following activities: establishment of platforms, baseline survey, development of action plan, implementation and monitoring and evaluation in targeted districts. The action plan will include among its key activities the promotion of innovative technologies for improving quantity and quality of beef production and reducing range land degradation, analysis of markets opportunities and linkages for selling cattle and beef products identified and tested.

Concluding Remarks

To conclude, the Coordinator of the Innovation Platforms, needs support from the heads of RAB/programmes and MINAGRI/ Projects operating in the selected sites. Capacity building for Third RUFORUM Biennial Meeting 24 - 28 September 2012, Entebbe, Uganda

different stakeholder groups in short-term pose a major challenge; the membership of the platforms is very dynamic, with new members joining and others dropping out. On the other hand, there is limited number of researchers with skills in integrated approaches and limited numbers of social scientists able to facilitate the social components of the approach. Furthermore, in some cases farmers and local partners have not adequately owned the implementation plan and they still think that it is RAB business. In general, there is a need of multidisciplinary teams to work on IPs. Many of the IPs are at different stages of their implementation plans. Half of operational ones have completed all stages and continue to develop projects. Some opportunities are offered to make progress: farmers and local leaders are interested in the approach and demand-driven technology generation and dissemination has become possible. Since RAB has lots of technologies to be transferred, given all these opportunities, it is suggested to scale up the approach in Rwanda. References ASARECA, What are they doing, where? Tracing ASARECA/ SCARDA MsSc scientists, Published by ASARECA, on Wed, 2012-09-26 16:21, www.asareca.org, visited on 1/10/ 2012. Dusengemungu, L. 2012. Report from Muhanga District Banana Platform, RAB, 16/10/2012 Dusengemungu, L. and Ndayisenga P. 2012. Report from Kirehe District Platforms, RAB, 16/09/2012. Dusengemungu, L., Kibwika, P. and Kyazze, F.B. 2012. Innovation platform as an approach to enhance food security in Rwanda: Experiences from maize platform with Research into Use Project (2008-2010). Proceedings of the Third RUFORUM Biennial Meeting 24 - 28 September 2012, Entebbe, Uganda. RUFORUM Working Document Series 7(2): Megan Lindow, 2012. Bulding the Foundation for Research in Rwanda, RUFORUM Case Studies, RUFORUM &RAB, 2012, www.ruforum.org/a/resources/article/download/66, visited on 18/9/2012. MINAGRI, Fishing ban on Kivu Lake lifted, MINAGRI flash news, CICA, 5/10/2012.