

# sharing lessons to enable innovation in agriculture

## RIU Programme: Strategies for Achieving Large-Scale Impact in Nigeria

The biggest milestone in 2009 in the RIU Programme was the devolution of greater managerial autonomy to the country programmes. Africa country programmes now have greater administrative autonomy to initiate and shape the thematic priorities of their respective programmes, develop two-year work plans, negotiate for and manage country programme budgets, source for and contract human resources and various supporting services as needed, and form intellectual partnership with the Central Research Team (CRT). We now have new lines of reporting, new ways of monitoring our work, new partners in the CRT, and a new and simplified head-office structure and channels of internal communication. In comparison to the previous management structure, these were, indeed, radical changes and it is perhaps not hyperbolic to say that this is a 'new RIU Programme'

Of course, much more is now expected of the Africa country programmes, and that is fair enough, for 'to whom much is given, much is expected'. Issues of particular priority still vary across the country programmes, but it is expected that every RIU country programme will take effective measures to scale up the impact of the programme. Therefore, irrespective of any differences in thematic focus, our collective responsibility at this point in time, in preparation for the external evaluation of our work, is to demonstrate 'impact at scale'. Each country programme has the responsibility to find and apply the most effective strategies to demonstrate impact at scale.

Unlike some other country programmes that experienced mandatory cutbacks in the number of innovation platforms, the RIU-Nigeria programme got approval to continue working on the three sectors originally selected (i.e. Cassava, Cowpea-Soybean-Livestock and Aquaculture value chains). The Nigeria programme has so far pursued a combination of three strategies which have proved effective. Namely, these are:

- 1. Multi-stakeholder networking;
- 2. Leveraging programme impact through engagement with national policies, institutions, processes and priorities; and
- 3. Collaborating with other development agencies working in Nigeria to maximize impact and avoid duplication of effort.

The rest of this article will briefly describe each of these strategies and explain how they have been applied or will be applied in Nigeria, and the observed effects and lessons learnt so far or expected.

### 1. Multi-stakeholder networking

The traditional, linear approach to agricultural extension has not produced the desired results in Nigeria both in terms of demonstrating effectiveness and in achieving sustainable impact at scale. As a pilot alternative, the RIU-Nigeria programme facilitated the formation of occupational networks around getting



specific agricultural research outputs into use in targeted value chains. The networks, which we call 'Innovation Platforms' or 'IPs' essentially consist of mostly self-interested business interactions or economic transactions, although the interactions are starting to produce corollary social and political capital.

The economic interactions have addressed some specific research-into-use questions related to crop production (i.e. adoption of inputs, improved crop varieties or farm management), post-harvest (i.e. improved storage methods, value addition, marketing, etc) and inter-linkages to other agricultural value chains. Although each IP has no more than three dozen direct members, some non-members of the IPs have had economic reasons to 'copy' or replicate perceived improvements. For example, a farmers associations which is not a member of the Cowpea-Soybean IP has proposed to partner with a member of the IP in accessing improved cowpea and soybean seeds from the private seed companies next year, because the farmers who purchased the improved crop varieties this year demonstrated a higher yield per hectare than the farmers who used the traditional varieties.

In the coming years, this trend is expected to continue propelling the diffusion of the targeted RNRRS outputs whose uptake has so far been facilitated by the RIU-Nigeria programme. However, the pace of technology diffusion will have to be gradual because the uptake is voluntary and driven by perceived economic rationality and private capital. It is a significant development that farmers and other users of agricultural research in Nigeria would step forward and propose to pay for improved variety seeds, in a country where the extension system has historically sometimes paid farmers to adopt.

### 2. Leveraging Programme Impact Through Cooperation with National Policies and Priorities

The RIU Programme is relatively a short-duration programme. Realistically, the processes for mainstreaming research into use across the National Agricultural Research System (NARS) can only be achieved over the long term, perhaps many years after the DFID-funded RIU Programme shall have phased out. Therefore, it makes good sense for the RIU-Nigeria programme to engage with related national policy or policies, institutions, processes and priorities as a strategy for achieving the institutionalization of research into use culture, using positive lessons demonstrated through the RIU Programme-assisted IPs in Nigeria and elsewhere. Leveraging large scale impact in that way will be more sustainable, but it cannot be a quick-fix.

RIU-Nigeria has formal collaboration with the Agricultural Research Council of Nigeria (ARCN), the national body responsible for coordinating the work of all national agricultural research institutes (NARIs) and agricultural colleges in Nigeria. Founded in 2007 when the RIU programme was just conducting a Country Assessment in Nigeria, the ARCN's formal mandates include getting national agricultural research outputs into use. The ARCN and RIU programme, being natural allies in terms of having research into use mandates, have strong mutual interests in collaborating. One of ARCN's stated priorities is to carefully observe the processes and performance of the innovation platforms currently facilitated by RIU-Nigeria in the Cassava, Cowpea-Soybean and Aquaculture sectors and learn lessons there-from so as to start replicating the IP processes in 2011 in other agricultural commodity sectors across the country.

To this end, the ARCN has two RIU desk officers who participate in IP activities both at the country office in Abuja and in the field across the states. ARCN has stated its plans to involve 14 national agricultural research institutes and 20 agricultural colleges in arrangements that will mainstream research into use across the country. The arrangements will involve facilitating the formation of innovation platforms on various commodity sectors matching the diverse mandates of the national agricultural research institutes. This will be an important and sustainable achievement of impact at scale for the RIU programme in



Nigeria, but it will require working with the ARCN to re-orientate the research community away from their current fixation with blue-sky research. I will also involve institutional capacity development assistance to both ARCN and the various national agricultural research institutes, possibly in the form of periodic workshops aimed at changing the mindset of scientists so that they can become more responsive to research questions emanating from farmers, marketers and manufacturers. Such a process might not reach full fruition before the expiration of the current RIU programme tenure in June 2011.

Another aspect of policy engagement involves RIU-Nigeria commissioning consultants to appraise specific policies that are affecting the development of the targeted value chains. The consultants collect information from all stakeholders, including the policymakers, and present their report to a stakeholders' forum for their feedback and comment. The finished report, with recommendations for improvement, is then used by RIU-Nigeria in follow-up work with the responsible entities.

The policy directive on cassava flour has already gone through these stages, and RIU-Nigeria has shared the final report with the National Assembly's House Committee on Agriculture which is now processing a privately sponsored Bill on cassava. When the Cassava Bill comes up for public debate in 2010, RIU-Nigeria will also facilitate the preparation and presentation of a Memorandum reflecting the views and interests of the stakeholders who are members of the RIU-assisted Cassava IP. Consultants are currently appraising the policies affecting cowpea and soybean value chains, and will be presenting their report to the value chain stakeholders in January 2010, to gather comments for incorporation into the final report which will be shared with policymakers and practitioners.

### 3. Collaborating with other Development Agencies

One of the strategies being pursued by RIU-Nigeria to achieve programme impact at scale is interprogramme collaboration with other development programmes and agencies in the country. In recent years, some international development assistance programmes have variously invested in aspects of agricultural commodity value chains in Nigeria, but given the huge population and land mass of Nigeria, there are opportunities for inter-agency or inter-programme collaboration to leverage impact at scale.

Consequently, RIU-Nigeria partnered with selected seed propagation companies in 2009 in facilitating the availability and distribution of seeds or cuttings for improved crop varieties during the planting seasons for cassava, cowpea and soybean (RNRRS: CPP22, RNRRS: CPP24, RNRRS: CPH39, RNRRS: CPH41, RNRRS CPH30); market linkages and other processes for post-harvest value addition were also facilitated through inter-agency collaboration, particularly with independent marketers, marketers' associations, and the respective Agricultural Development Programme (ADP) state offices which are traditionally responsible for extension services in the various states of the country.

The boldest of these collaborations involved working with the International Institute of Tropical Agriculture (IITA) at its Kano Station, to partner with the IITA-administered Purdue Improved Cowpea Storage (PICS) Programme (funded by the Bill and Melinda Gates Foundation), to promote the adoption of an affordable cowpea storage method. The technology involves the use air-tight, three-layered bags to preserve cowpea from weevil infestation.

Weevil infestation is a major problem faced by cowpea farmers and marketers across Africa. Typically, the weevils infest and completely ravage the stored cowpea, reducing everything to unusable powdery substance, causing the loss of 100% of the stored cowpea. The triple bagging storage method is an alternative to the use of chemicals to preserve the cowpea from weevil infestation. Due to improper application of the chemicals or the use of extremely toxic substances to increase deterrence to insects, some of the stored cowpea can get polluted and become unsuitable for human consumption. In recent

Utiang P. Ugbe, RIU-Nigeria 3



years, there have been reported cases of hundreds of human fatalities resulting from the consumption of chemically preserved cowpea in Nigeria.

The programme collaboration involving RIU-Nigeria, the PICS Programme, the National Agency for Food and Drugs Administration and Control (NAFDAC), and the Agricultural Development Programmes (ADPs) in six cowpea-producing states (namely, Bauchi, Gombe, Jigawa, Kaduna, Kano and Katsina), aims to facilitate the adoption of the triple bagging method by 600,000 farmers and marketers before June 2010, and another one million adopters before June 2011. These impressive numbers are a direct result of the inter-agency pooling of resources, and exclude the smaller numbers of beneficiaries that each of the collaborating programmes will impact through stand-alone programme interventions. The RIU-PICS-ADPs collaboration on cowpea storage has already demonstrated immense success and RIU-Nigeria will explore similar collaborations to address specific innovation challenges in both cassava and aquaculture sectors.

### **Implications for Programme Impact Evaluation**

Based on the foregoing, some general lessons can be deduced and the following general statements can be made. First, the biggest possible impact at scale in agricultural research into use will require the institutionalization and mainstreaming of certain processes and private sector roles. Successful demonstrations under the current DFID-funded RIU Programme will also need to be incorporated into the national formal system. However, the steps being taken by the ARCN to replicate the RIU-assisted Innovation Platform approach across many commodity sectors and on a large scale across the country, might take longer than the timeframe of the current RIU Programme for the required institutionalization and mainstreaming processes to be completed.

This needs to be borne in mind when evaluating the impact of the current phase of the RIU programme in Nigeria. While it is important to expect to 'see' the numbers of beneficiaries already impacted directly by the RIU programme, it would also be important for the evaluation to assess the extent to which the national partner institutions (i.e. the ARCN, the ADPs, and the national agricultural research institutes) have initiated putting in place processes toward mainstreaming and propagating research into use as a systemic culture in Nigeria.

Second, although the Country Assessment and other programme development phases for the RIU-Nigeria programme started in 2007, the first IP was formally inaugurated only in February 2009. As at the time of writing this article, the Nigeria programme had only one year of implementation, including the 'slow' months of relative uncertainty during which the RIU Programme head-office and organizational changes were being carried out. The point here is that the Nigerian NARS will need continued support from the RIU Programme beyond the short duration of the current RIU programme, to allow the ARCN to fully imbed and mainstream effective research into use principles into the NARS and private sector cultures.

All things considered, it is hoped that the effectiveness of the strategies and processes currently being demonstrated on a small, pilot scale by the RIU-Nigeria programme will become self-evident. In other words, the evaluation should also take into account the anticipated (long-term) impact of current processes. This can be assessed by interviewing various institutional partners to the RIU-Nigeria programme.

#### For further information please contact

Utiang P. Ugbe RIU-Nigeria Email uugbe@msn.com