

4. The Need for Reform in Agriculture Extension and Rural Advisory Services in PNG

Since Independence, agriculture extension has played a pivotal role in agricultural development. Extension service is still a much needed investment in enhancing human and social capital of the rural population. However, as this paper has established, extension services in PNG are in disarray, poorly resourced, and lack leadership and direction. The challenges are huge, and there is a growing realization that an urgent sector reform must occur, to mobilize strong advisory institutions that would empower and provide the foundation of support to rural populations to research markets, access technologies, and influence the policies that affect their lives.

4.1 The Challenges to Extension Reform in PNG

The Food and Agriculture Organization of the United Nations (FAO), and the international advocate of pluralism in agricultural extension, the Global Forum for Rural Advisory Services (GFRAS) have identified the overall challenges in reforming global extension service, and where it may progress in the future (Christoplos, 2010; Pound, *et. Al.*, 2011). Most importantly, any effort in mobilizing the potential of agricultural extension requires an open mind about what needs to be done and who is to do it. The process should be assisted by experiences regarding the different roles of public, private and civil society actors in a variety of extension tasks. Extension reform must therefore involve a broad range of stakeholders. There are five key challenges that need addressing if the full potential of agricultural extension services is to be realized in PNG:

1. *Focusing on best-fit approaches*

Extension services are an essential vehicle to ensure research, development of farmer organizations, improved inputs, and other elements of rural development support actually meet farmers' and other rural actor's needs and demands. While the search in the past has been on 'quick-fix' approaches that can be easily implemented and scaled-up, experiences so far in PNG indicate that no 'one-size-fits-all' approach is unacceptable. Programs must take into account the diversity found in rural areas, where governance, levels of capacity, farming systems, and many other factors differ. These variables must be considered when designing policies, approaches, programs, and institutions. Further, the rapid and unpredictable changes in markets and climates, and the diverse ways that these changes impact different groups, mean that extension services cannot provide blanket advice.

The focus on best-fit approaches is an opportunity to shape services that are relevant, pluralistic and demand-driven. It is an opportunity to make extension flexible enough to deal with current and future rural development issues and crises. Policy makers and planners must invest time and effort in devising approaches that fit unique situations.

2. *Embracing pluralism in advisory service provision*

Presently, there are a growing number of different types of extension services providers and approaches in PNG. This is appropriate, as the diversity of rural life and needs should be matched by diversity in services, approaches, and providers. Service providers also

differ in their types of clientele. Three categories of providers exist: the *public*, *civil society organizations* (NGOs), and *private sectors*. While public extension provision has played a major role in PNG agriculture, private and NGOs and farmer organizations are also key players today.

Public extension services must continue to play a coordinating, technical backstopping, and quality assurance role within pluralistic systems. They should ensure that national development objectives such as poverty reduction are met and provide services of a 'public good' nature. They have the advantage in offering impartial advice and dealing with issues related to sustainable natural resource management.

Civil society organizations have a key role to play as well, Farmer organizations are the most sustainable type of service provider. Farmer organizations organized by commodity groups provide advisory services related to the commodity along the entire value chain. Like public service providers, civil society organizations are critical to reaching disadvantaged groups. They must be steadfast in serving these clients to overcome potential elite biases.

Private sector providers assist a limited clientele, primarily related to high-value products and relatively well-off producers. Input suppliers provide information regarding new varieties and planting methods to all kinds of producers. While private providers are not likely to reach hundreds of thousands of poor farmers, particularly women, they play an important role in linking producers to market and increasing incomes.

Institutional pluralism through different service producers must be matched by pluralism in financial flows if extension services are to be broadly accessible. Private investment will not address the needs of all rural producers. Hence, **targeted public investment in the national extension service will remain crucial, even when services are carried out by non-state providers**. Private advisory services may actually be better at reaching the poor farmers than the public sector if incentives such as subsidies are provided.

Pluralism in advisory services provides the opportunity to capitalize on the comparative advantages of different types of organizations. The critical element is the coordination of the different service providers, in ensuring that vulnerable sectors of the farming population are not forgotten, and avoiding excess duplication of efforts. Public financing, technical backstopping, and coordination are needed in pluralistic systems of extension delivery. This will guarantee the quality assurance of advisory services, and ensure that the needs of the disadvantaged are met.

3. ***Increased accountability to rural clients***

There are increasing calls for 'demand-driven' and 'farmer-led' rural advisory services in PNG. The need for planning, monitoring, and evaluation of such services would be best met by farmer organizations. A challenge here is the limited capacity of current farmer organizations and their higher level federations to plan and monitor extension programs.

Additionally, when focusing on demand driven and farmer-led approaches, there is a need to be aware of gender, age, and cultural differences. This is critical, because policy makers and planners must ask the hard question about whose demands are being served. Women have an important role in PNG agriculture, particularly in subsistence food production. Different ethnic groups have unique links and obstacles to reach different markets. Agriculture today is perceived negatively by the younger generation and seen as unrewarding. Climate change is having severe impacts on people living in vulnerable environments. However, extension alone cannot be the solution for addressing any of these trends. But extension must be part of more comprehensive solution to equity challenges by involving wider sets of stakeholders in innovation systems and among the government, private sector and civil society.

Utilizing farmers' organizations is not the only way to make extension services more accountable. The essence of decentralization, if well planned and implemented, can increase accountability to rural people through subsidiarity – placing responsibility for activities at the lowest possible level of aggregation. The ways that extension services are financed can be a means of holding them accountable for the quantity and quality of services they provide. However, LLGs and other stakeholders need capacity to plan, manage, and monitor such programs. Increasing accountability to rural people must go hand-in-hand with investment in the capacity of service providers and local authorities and assurance of quality to make these systems work.

Accountability in extension also means knowing whether a program, method, or organizational innovation actually worked or not. Much is still unknown about the effectiveness of extension programs and approaches in PNG. Methods for clear, rigorous, and participatory evaluation of extension programs must be found. Further research is also needed to provide a better understanding of the complex relations and multiple accountabilities that exists between service providers, their clients, and other stakeholder institutions, such as LLGs, private investors, researchers, and farmer organizations. This offers the opportunity to make extension services more relevant and effective for rural people and their livelihood goals.

4. Human resource development for extension

Lack of human resources is a fundamental bottleneck to effective extension given the new challenges facing rural development in PNG. Since the conversion of NDAL agriculture colleges to university programs in late 1990s, support for agricultural education towards extension has reached a point of near-collapse. There are different levels of HRD needs for extension: farmer level; extension agent level; and higher education/training institution level.

Agricultural education and empowerment of farmers is an important component in the efforts to enhance their capacity to demand and utilize advice. Farmers and other rural actors need technical and management skills, as well as the ability to operate in groups, use information and communication technologies effectively, and seek markets.

Extension agents (public or private) need capacity development as well. Effective advice is no longer a matter of simply providing messages about set technological packages to rural people. There is a shift from technical approaches to those that are organizational, cultural, and social. Advisors must also have skills in building social capital, facilitating discussions, and coaching stakeholders in natural resource management and market supply chains. They must shift from lecturing to empowering clientele, so as to deal with uncertainties and variability like climate change and market trends. Such tasks require professional soft skills in critical thinking, problem solving, organizational development, and negotiation.

Agricultural **universities** have an important role in training people within the agriculture sector. The efforts being made to invest in tertiary agricultural education, particularly in curriculum adjustments at UNITECH and UNRE is encouraging. The expansion of farmer training efforts of IATP and SPISARD should be supported, as this would lead to enhanced HRD throughout the agricultural innovation system.

Public funding for HRD in extension is also important. Plans for mobilizing the potential of agriculture extension must reflect the prevailing human resource crisis, and include concerted and sustainable strategies to address it. If plans are followed through, it is an opportunity to equip advisors and other rural development actors with the necessary skills to deal with the constantly changing and complex arena in which they operate.

5. *Sustainability: beyond projects to institutions.*

The sustainability of pluralistic extension services will depend very much on government commitment and financing. Past extension projects have shown that project resources can mobilize service provision for a short period of time, but sustainability of these projects has generally been poor. All too often, the high profile ‘quick impact’ investments (such as addressing food insecurity or climate change) have distracted attention from the need to strengthen institutions that will carry out future programs. If this is to be avoided, future project support must be balanced with systematic, institutional approaches to reform and strengthening pluralism in advisory service systems.

The changing technological landscape, including the spread of internet and use of mobile phones, has demonstrated the potential of ICTS in enhancing access to information about markets, weather, and technological options, and improve communication and linkages among stakeholders. The success of reducing the digital divide is often heralded as yet another ‘silver bullet’ for sustainability. It is expected that the use of ICTs would reduce the problems of bloated bureaucracies and high recurrent costs.

The opportunity here is to ensure that the newer methods are integrated within the work of existing institutions and organizations. Methods must be adapted to existing capacities and the context where they will be used. In spite of limited knowledge on the varying effectiveness of various approaches in addressing different needs, demands, and capacity constraints, it is clear that the extension service in PNG forms an essential institution within the rural development sphere.

4.2 A New Agricultural Extension Policy

The White Paper on Agriculture – Sector Policies 1996-2000, was the first Government policy document in the post-Independence period (GOPNG, 1996). Its overall policy thrusts were to increase production, and improve sector productivity and sustainability through appropriate and cost-effective technologies, and improved extension and development approaches. Since then, several high level forums (GOPNG, 2000; Dekuku, *et. al.*, 2005) have highlighted the need to formulate a comprehensive national extension policy that is inclusive, and advocates pluralism in service provision and financing.

A recent review of extension in PNG by the Centre of Tropical Agriculture and NARI (Sitapai, 2011) has further concluded that a new order to agriculture extension in PNG is overdue, and this reform should be anchored on a new agricultural extension policy. Based on the key challenges to extension reform outlined above, the following principles are proposed as guides to the formulation of a national agricultural extension policy.

(a) Extension is an integral component of a national agriculture policy.

In the absence of a national agriculture policy framework, the role of extension can be redefined in a set of new institutional structures that recognize that extension alone is not the solution. The complex nature of extension systems, tasks and roles within agriculture and natural resources management systems means that a more integrated perspective is required on the facilitative role of extension for achieving synergies with new investments in research, other rural services and new types of participatory programming.

In essence, an agricultural extension program is more likely to succeed if the conditions for growth (in agriculture and related industries), are well articulated in the national agricultural policy and plans. But it must be stressed that the emphasis should be on developing an extension policy rather than a national extension structure. The policy should be flexible with indicative framework for incentives intended to create synergies between different actors.

(b) Extension is advisory, not prescriptive.

Extension is too often merely seen as a vehicle for spreading scientific and technical progress and technology transfer. But this is a narrow and highly unsatisfactory definition. Producers need more than just technical information. There is rarely a ‘one size fits all’ solution to address the mix of technical, economic, commercial, social and environmental aspects of farming constraints. Farmers need information on markets, credit facilities, and consumer demands. However, simply making information more readily available is not enough to ensure that it is used effectively. On the various levels of their activities (farm, local community, industry subsector), producers must themselves be able to analyze the constraints, seek out and test solutions, and make choices from an array of existing service producers.

By building producers' capacity to take individual and collective initiatives, facilitation makes available technical solutions that are more relevant to farmers' constraints in the short term, and in the long term provides a framework for ongoing innovation. Therefore, agricultural extension activities should facilitate:

- direct exchange between producers as a way of diagnosing problems, capitalizing on existing knowledge, exchange experiences, disseminating proven improvements, and even defining common undertakings; and
- relations between producers and service providers (public and private).

Future extension personnel must be adept in participatory techniques, and resourceful in drawing on a mix of communication methods and technologies. They must think in terms of market opportunities, increasing producer incomes and total farm management.

(c) Extension services must be made accountable to producers.

Producers should be treated as clients, sponsors and stakeholders, rather than beneficiaries of agriculture extension. Extension activities are more effective when farmers are directly involved in defining, managing and implementing them. This happens when:

- farmer organizations manage their own technical services;
- producer groups and private (management, literacy training) or public (research, training, extension) service centres work together on a contract basis; and
- producers can target funding on problem solving for their specific needs.

(d) Market demands require farmers to forge new relationships with value chain actors.

Markets are the driving force in agricultural development. A major objective of the Government is to expedite a gradual transition from low-productivity subsistence farming to specialized production based on comparative advantage and the trading of surpluses on the market. Small farmers must be able to produce a sufficient range of competitively-priced outputs in the right quantity and quality at the right time. The move from subsistence to commercial farming is consumer- rather than producer-driven.

Extension must be concerned with local economic development and empowerment, and not just farming itself. In effect, market-oriented extension is about making sure a range of actors are able to collaborate with one another. For instance, if traders and input vendors want to invest in a particular product, they may need to provide advice to farmers about varieties and planting methods. The other value chain actors who are advising farmers about what they want to sell (inputs) or buy (farm produce) therefore also need to understand the technology themselves in order to provide such advice. These actors require access to extension as well.

(e) New perspectives are needed on extension financing and extension delivery.

In the past, extension was seen to be a public good, delivered by public sector agencies and financed by public resources. This is no longer the case:

- Extension systems are now recognized as encompassing an assortment of public and private goods.
- Public agencies are but one channel by which farmers and other value chain actors access information.
- Readiness to finance extension from public resources has decreased.
- It is recognized that the willingness of the clients of extension to pay for services was underestimated in the past.

Extension financing and extension delivery should be seen as separate responsibilities. Regardless of whether extension services are financed by farmers, the government or commercial actors, it is essential to remain impartial about which service provider should be contracted to deliver the service. Extension activities can be exclusively financed by the government and entirely delivered by private extension agents. There are also examples of public extension agencies being ‘contracted in’ by non-state actors when, for example, NGOs have received contracts to provide services but have been unable to scale up to meet their responsibilities.

There is also a need to understand how the flow of resources can be used to enhance empowerment and accountability. The ways that extension agencies receive payments for their services have profound impact on their accountability to their clients for providing quality services. If resources are provided to individual farmers or their organizations in the form of vouchers or other appropriate mechanism, they can contract the service providers of their choice, thereby increasing their power over the rural innovative system.

The choice of financing structure is as much about demand-drive as it is about covering the costs of services. Indeed, any scheme that provides token payments for services by the rural poor is unlikely to generate significant financial flows from the farmers themselves. The objective is rather to ensure ownership of the services through redirecting financial accountability. The extension agent needs to feel that the client is the farmer and not the donor or the Ministry.

(f) Pluralism and decentralization require coordination and dialogue between actors.

A centralized national extension system did work prior to Independence, but has produced mixed results since then. Also, no single extension approach or organization fits all situations. The wide range of social environments, economic contexts, agro-ecological conditions and many different types of crops/livestock have produced a variety of farming systems challenges in PNG. The need for integrated approach to extension is particularly important at local levels. With decentralization and more pluralistic arrangements, progress should be made in promoting the subsidiarity of extension services and in making them accountable to farmers. Hence, more exchange for learning and coordination among local government, the private sector and civil society is required. The shift of responsibilities to local levels should also be accompanied by a shift of resources or readiness to pay the relatively high recurrent costs of these services.

Presently, human resources capability for effective extension at LLG level is very low. There is also poor strengthened coordination and linkages between central ministry-led bureaucracies and LLGs, and this trend must be reversed. As decentralization is here to stay, there must be strong and objective leadership to make sure that the effectiveness and sustainability of extension is also recognized as a local responsibility, albeit with financial support from the National Government. Decentralized extension must not become a responsibility of everyone and nobody, but should be managed by professional service providers specialized in agricultural and rural development.

New forms of collaboration, coordination, communication and cost-effective access to new innovations (e.g. by using modern ICTs) are crucial for decentralized extension providers to enable them to respond to these new challenges and to keep up-to-date with their knowledge and skills.

As stated above, a sound national extension policy must be flexible and promotes pluralism in extension service and extension financing. The policy must forge and seek commitment by public and private sector agencies to contribute to adequate and sustainable funding of extension programs. The Government, through its regulatory powers and financial resources, can guide the activities of private and professions actors by setting:

- sectoral, geographical or issue-specific priorities,
- skill requirements for agricultural advisors,
- the eligibility criteria of private training, outreach and advisory services, and
- frameworks for necessary consultative mechanism.

However, the national extension policy-making cannot be left to the Government alone. All stakeholders must be involved, especially the farmers. This means facilitating:

- Farmer representation in policy discussions, including management and policy bodies of extension and semi-public extension, as well as training and research organizations;
- Producer representatives' input into groundwork for activities; and
- Capacity building for producer organizations to handle such functions by training their elected leaders and staff.

4.3 A National Coalition of Extension and Rural Advisory Service Stakeholders

The overwhelming conclusion of this paper is that, small-holder farmers, especially the resource poor in remote rural communities of PNG are not receiving adequate level of extension and advisory services. Their inability to articulate demand and the failure of other actors to understand their demands act as deterrents to fully benefitting from the services. The diminishing role of extension and advisory services as public goods is also a hindrance to future growth and rural development.

It is apparent that the responsible Government agencies have turned a 'blind eye' to the current state of agriculture extension in PNG. This is an untenable situation. To sensitize wider extension stakeholder awareness of the plight of the extension service and the prevailing issues, an effective advocacy mechanism must be established to provide leadership and coherent voice for rural advisory services. This effort must aim at ensuring that the prevailing issues remain an integral part of the development discourse, and future public sector reform.

Presently, the Agriculture Sector Committee of the Consultative Implementation and Monitoring Council (CIMC) acts as a forum for reviews and sanctioning of sector policy issues and strategic directions for agricultural development. This paper proposes that this mechanism of dialogue be expanded to allow the establishment of a **National Coalition of Extension and Rural Advisory Service Stakeholders (NCE&RASS)** within the CIMC. NCE&RASS will provide an essential forum for extension stakeholders to meet and reflect on their experiences and to formulate relevant inputs into wider policy discussions and institutional reforms.

As a voice for the extension community, NCE&RASS shall ensure that extension platforms at global, national and local level are fully embraced to shape future the rural development discourse. The policy dialogue on extension and agricultural development at all three levels will become more relevant and evidenced-based if people knowledgeable about extension are involved. The stakeholder groups that would constitute NCE&RASS are depicted in Figure 1. The groups are:

- ***Clients of extension and advisory services*** – PNG men and women farmers;
- ***Service providers*** – public sector (national, provincial, local advisory, financiers), private sector (advisory, processors, traders, exporters, financiers), civil society (producer organizations), research, and agriculture education systems; and
- ***Enabling organizations*** – National, regional and global policy makers, donors, financial institutions, ICTs and media groups, and regional and global extension networks.

At the global level, the effort in raising the voice of extension stakeholders has been heightened with the establishment of the Global Forum for Rural Advisory Services in 2010 (GFRAS, 2011). GFRAS is a forum of various stakeholders worldwide who have an interest in extension and rural advisory services. Its mission is to provide a space for advocacy and leadership on pluralistic, demand-drive rural advisory services within the global development agenda. This will result in rural advisory services and extension systems that more appropriately, effectively, and sustainability contribute to the reduction of hunger and poverty worldwide.

GRFA has three key functions (GFRAS, 2012):

- (a) **Providing voice** for advisory services within global policy dialogues and promoting improved investment in extension;
- (b) Supporting the development and synthesis of **evidence-bases approaches and policies** for improving the effectiveness of extension; and
- (c) **Strengthening actors and fora** in extension through facilitating interaction and networking.

The country link to GFRSA is through the Pacific Islands Extension Network (PIEN) established at the Secretariat of the Pacific Community. When formally established, NCE&RASS shall become the national focal point for PIEN and GFRAS in PNG. As a sub-sector mechanism of CIMC, it shall become the national forum for dialogue and coordination between farmers and other extension stakeholders (public and private organizations). This dialogue must be equitable, and more importantly, coordination must not become central control by a different name.

Figure 1: Extension and Rural Advisory Service Stakeholders in PNG

