Promoting Integrated Approaches to Rural Development for Poverty Eradication and sustainable development: ***The Critical Role of Small-holder Agriculture***

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EXECUTIVE SUMMARY

The current thinking about rural development is outdated, and requires a radical re-orientation because of the following trends:
1) Poverty is rising and becoming concentrated in "higher risk agriculture" especially in those marginal and remote areas that are poorly integrated into markets.
2) The geographic spread of both traditional and high input, commercial agriculture is degrading critical natural resource systems.

Agriculture as a sector is now required to provide a whole range of economic, social, and environmental services. Models of agricultural intensification need to be reconsidered, especially in higher risk agricultural environments. It must be reoriented to both meet the needs of hundreds of millions of undernourished rural poor, whose survival depend primarily on small scale agriculture, and also to regenerate critical ecosystems.

Many examples from Africa, Asia and Latin America demonstrate that sustainable intensification of agriculture by small-scale farmers is possible in degraded rural areas. With low external inputs, agro-ecological farming methods can more than double agricultural production while also promoting environmental regeneration and local economic and social development. Despite this growing body of experiences in remote, high-risk production areas, most initiatives remain localized "islands of success". The predominance of "islands" is less a symptom of a failure to 'scale up', and more a reflection of the limits to bottom-up development within current policy, institutional, and governance constraints.

The current agricultural policy paradigm will no longer do. Existing policies favor industrial, export, and high input oriented agriculture. Despite analysis of the key elements of success, highlighted in this paper, current policies work against scaling up an effective model for sustainable agriculture and rural development model for higher risk environments. Many current polices are biased against the interests of the rural poor. The rural poor in so-called marginal areas are marginalized.
To change this, a more responsive set of "enabling" policies and governance processes are needed. Above all, the marginalized rural people and their organizations must be

empowered to help make policy, and negotiate with a decentralized state and the private sector in order to establish a balanced but also pro-poor rural development agenda.

This requires treating the smallholder peasant sector as one of the cornerstones of national economic and agricultural development, rather than a transitional social safety net along the road to urbanization and factory wage labor. Unfortunately, of the 16 or more Rural Strategies for Poverty Reduction, only two address small-holder agriculture in a substantive way.

THE CHALLENGE

About 1.9-2.2 billion people live in marginal, ecologically fragile, rural areas in developing countries of Asia, Africa and Latin America. Their agricultural systems are complex, high-risk and low yield (less than 1 ton per hectare)

Small-scale farmers, herders and landless rural laborers are the world's struggling underclass. They constitute almost four-fifths of the world's estimated 800 million chronically hungry people.

The vast majority of this immensely large group of undernourished people depend primarily on agriculture to provide most of their own food supplies and any cash income needed to purchase goods and services. Even with dramatic increases in non-farm economic activity, agriculture will remain central to secure livelihoods.

This rural underclass practice agriculture in conditions of poor soils, hillside slopes, arid dry lands, erratic rainfall, periodic drought, and menacing pest complexes. Annual crop production is both more risky and less productive. Their land is ecologically fragile, highly vulnerable to erosion, degradation, floods, landslides. Most of the extreme rural poor live in remote areas with limited access to roads, markets, inputs, irrigation, technical support, and social services.

Many of the rural poor are indigenous people, low caste or ethnic minorities. They are generally excluded from the key arenas of power and policy-making, despite the rhetoric of 'pro-poor' development strategies. The marginalization of such a huge mass of people is an affront to the expectations of sustainable rural development, as well as the UN Millennium goals.

For those remote rural areas, far from markets, off-farm employment will be less important than **agricultural development strategies to raise food production and**

increase its diversity and stability. If global economic growth continues, such areas are likely to fall further behind, concentrating poverty and environmental degradation where rural populations are rapidly growing.

KEY POLICY ISSUES

One of the key strategic questions facing national policy-makers is whether the peasant/smallholder farm sector should be treated as economically viable or simply as a temporary social safety net for the rural poor. There has been an apparent political willingness to accept a rather rapid rate of decline of peasant farming and the transition of poor peasants into pure wage laborers on commercial farms or in the cities.

Current approaches to hunger reduction emphasize investments to increase aggregate food production, raise farm incomes in high potential agricultural areas, reduce food prices to consumers, while providing direct assistance to the poor and marginalized 'low potential" areas through food distribution, including food aid.

For decades, it was assumed national economic development would lead people farming in such locations to leave for more productive regions, or the cities, so neither agricultural development or research was focused there. Despite significant migration, the rural underclass is prevented from joining the formal urban economy by lack of education, training and access to regular employment opportunities.

There are real dilemmas faced by policy-makers throughout the world:

- Should the smallholder sector be viewed as one cornerstone of economic and agricultural development, or a transitional social safety net along the road to urbanisation?
- Should peasant farming be connected to new sources of global capital, or protected from the potential downside of liberalization. Or should we be considering other roles and opportunities outside agriculture?

UNREALIZED POTENTIAL OF SO-CALLED MARGINAL AREAS

There is considerable evidence of largely unrecognized production potential in marginal areas to meet food security needs of the rural poor and even generating commercial surplus. Many examples from Africa, Asia and Latin America suggest that agriculture which is pro-sustainability and pro-people can yield greater agricultural production, environmental regeneration and local economic and social development.

Sustainable intensification of agriculture is possible in currently unimproved or degraded areas while at the same time protecting or even regenerating natural resources. In these lands, farming communities adopting regenerative agriculture have substantially increased agricultural yields while using low external inputs, without having to enter the market or incurring marketing costs.

There are many alternative and diverse methods to address soil nutrient constraints, nitrogen fixing legumes, intensified fallows, combined use of organic materials and chemical fertilizers that build up organic matter. These interventions, however, have not been widely disseminated in official extension programs that typically follow a fertilizer only model.

While many case studies from a variety of agro-ecological and socio-political contexts exist, most remain isolated "islands of success". Their value, aside from the benefits to the poor farmers involved, is to help us understand the policy contexts and instruments that promote sustainable agriculture and social change.

ELEMENTS OF SUCCESS

Resource Conserving Technologies (RTCs) for pest/predator, soil, nutrient and water management)

RCTs do two things. First, they conserve existing on-farm resources. Secondly, they introduce new elements into farming system that add value to these resources. The 3 main categories of resource conserving technologies are: Integrated Plant Nutrition, Integrated Pest Management, and Soil and Water Conservation. The most effective RTCs are multi-functional. They will improve several components at same time. Natural processes favored over external inputs; aim is to reduce costs and adverse effects on environment. Ecology, microbiology, and biochemistry advances have made possible more rigorous agro-ecological analysis to understand and manage soil nutrient and water flows, nitrogen fixation, and to understand pest-predator interactions that offer effective approaches to pest control.

Appropriate Technical and Organizational support

In most cases, specialized NGOs served as facilitators and intermediaries to catalyze community processes of farm and ecosystem improvement. Often this includes not just technical skills, but also the use of specialized staff to work as organizers, motivators, animators, and who can mobilize a new form of representative local leadership. The key is not technology but local governance and empowerment. There is little long-term gain

unless local rural institutions are strengthened.

Farmer-driven and Community based innovation and extension

Farmer participation in all stages of technology development and extension was a key factor of success. Case studies showed that agricultural and pastoral productivity was as much a function of human ingenuity and capacity as it is of biological and physical processes. Strengthened farmer capacity for technology development was partially achieved by promoting farmer learning networks, in which farmer leaders exchange experiences and lessons in developing local technologies. Almost all case studies reveal that volunteer or part time farmer extensionists are far more effective and cost effective than government extension workers.

Low cost inputs to reduce risk and generate early success and enthusiasm

Key resource conserving technologies were introduced in a strategic way to improve both short and long-term productivity of different production systems for farm and intensive garden production. Minimize use of purchased inputs. Major resource is enabling farmers to increase productivity of their land through a) converting labor resources, which often have low opportunity cost in off season, into productive assets b) improving knowledge resources about agroecological methods.

Improve the quality of local assets at farm, community and ecosystem level. Facilitate better mobilization of local human, social and financial capital to do so.

Invest in natural capital of farms and communities (savings and credit, natural capital, physical assets, human capital (health and education) and social capital (leadership, membership in formal organizations, kinship groups, learning networks). With appropriate support to build such local assets, farmers were able to diversify local diets, create conditions for high return on inputs, reduce risks, restore critical watersheds. This led to long-term and sustainable increases in productivity.

Strengthen the capacity of peasant farmer leaders, organizations and networks

A critical factor of success was to strengthen the capacities of existing or new community-based organizations or groups representing marginalized farmers to take effective collective action. Sustainable agriculture often requires coordinated natural resource management efforts (i.e. soil and water conservation). The types of local groups include: Natural resource management groups, Farmer field schools, Farm research groups, Farmer to farmer extension groups,Tree growing/protection

associations, Pastoral and grazing management groups.

Integrate agriculture with regeneration of the natural resource base

Ecosystem functions are essential to ensure continuing food production, watershed management, predator-pest relationships. Successful farming systems meet both food production needs and also protect critical ecosystems, forests and ecological services.

WHY ONLY ISLANDS OF SUCCESS?

The approach to sustainable agriculture advocated in this paper aims at a win-win vision in which small-scale farmers, rural communities, environments and national economies all win.

However, there are still many obstacles, threats and uncertainties. Despite increasing number of successful agricultural development initiatives in remote, high risk production areas, most of these remain localized "islands of success". The predominance of "islands" is less a symptom of failure to 'scale up', and more an accurate reflection of the limits to bottom-up development within current institutional constraints.

Successes at the project level have not or cannot be translated into public policy because of costs of scaling up, or the lack of incentives, or unfavorable institutional environments. Because they are not rooted in a broader policy context with strong institutional backing, these 'islands of success' frequently fail to spread or be scaled up.

In adverse policy climates, specialized and capable NGOs can succeed on a small-scale, but then come up against their institutional limitations. NGOs have a proven record at 'island' level where they can control conditions, but not on a wider scale. The entire NGO sector, by nature, tackles social development in a piecemeal manner.

Some of the more important unfavorable policies for promoting sustainable agriculture in marginalized rural areas are:

- Most technology promoted by extension services were developed for systems with lower production risks, and less depleted resources. Marginalized small scale farmers lack suitable technology for very rapid conversion to fallow to permanent cropping systems.

- Agricultural extension services are poor, or non-existent in remote rural areas. Where they exist, extension approaches are top down, not oriented to people-centered, capacity building, and being farmer driven

- There has been a sharply reduced external financing for agriculture and rural development in low-income countries. World Bank reduced lending from nearly 6 billion in 1986 to 2.7 billion in 1996. Of this remaining investment, most goes to the more favored agricultural areas, and much less to the "so-called" marginal lands

- Lack of rural roads, infrastructure, technical and financial services. In this context, market reforms have only a weak supply response.

- Existing policies favor industrial, export, high input agricultural development. There is a bias against sustainable agriculture. Many scientists and policy makers argue vigorously that modern agriculture, high external inputs, is the only path for agricultural development; There is no accepted sustainable agriculture and rural development model for higher risk environments;

- National Planning, Decentralization and Participation : Most normal development planning is highly centralized, does not involve major stakeholder groups as partners, is focused on a narrow technical view, and does not take into account social economic or environmental complexities.

POLICY IMPLICATIONS

The current paradigm of agricultural policy will no longer do. A more disaggregated and responsive set of policies and processes are needed, particularly for those for whom many public and private policies do not work – the small holder and peasant farm families.

Between now and 2015, significant investments for rural development and agriculture should be concentrated in regions where poverty and hunger are most highly concentrated, and aim for broad-based sustainable production increases among farmers currently producing less than 2 tons per hectare, and that enhance ecosystem management.

Identifying and developing viable policy options for improving the sustainability of agriculture and regenerating rural economies will require multi-stakeholder approaches to policy formulation. Above all, the marginalized rural people must be empowered to make policy rather than merely ignore, evade or suffer its consequences.

Above all, policy makers should create the right environment for peasant farmer organisations and new social movements to be partners in decentralized policy making. In policy terms, this requires governments to provide a non hostile institutional and legal framework for indigenous peoples, peasant organizations and producer groups from marginalized areas.

A focus on governance –the structures and processes that determine how policy is made and
implemented – is key to enabling marginalized rural people in developing countries to negotiate with the state and the private sector in order to set a new political and economic agenda.

Sources

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