Independent Review of Myanmar Draft Agriculture Investment Plan

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For my assessment, I classify the review areas (in the Guidelines for Review of Non-African Country Investment Plan) into three sections, below, and map the questions into them and provide responses.

A. HOW GOOD IS THE OVERALL CHOICE AND DESIGN OF THE PLAN'S ACTIVITIES? (AREAS 1 AND 2 OF REVIEW)

Area of Review 1: Likelihood for the investment programs to realize growth and poverty reduction: Is it aligned with the growth and poverty reduction targets in the country strategy? Is it aligned with the internationally-agreed Sustainable Development Goals to end poverty and hunger by 2030?

I see as the central question in my assessment of the plan the first area of review, "likelihood for the investment programs to realize growth and poverty reduction" and specifically, "is it aligned with the growth and poverty reduction targets in the country strategy?" I read this as basically asking whether the plan proposes doing the right set of things to get at growth and poverty reduction goals. The amount of activities proposed and the ambition of the achievements seem to me to exceed the relatively modest amount of money of the investment plan.

The main question therefore is whether the investment programs will help Myanmar to start to reorient its agrifood action strategies and policies toward a quantum jump in agrifood sector growth and poverty reduction. I think the basic answer is "yes," I do think the basic ideas of the plan in general align with that objective. There is room throughout the plan to adjust the activities, and pare down and prioritize some actions per pillar. But I think that the sounding board system and the evaluation methods should help to do those things as the programs roll out. Thus I will focus on the big picture of what is being done and if it seems the right strategy, and make a series of points as follows.

The investment plan is fundamentally good for meeting growth and poverty reduction goals in the set of basic orientations:

First, the plan focuses on supporting moving Myanmar's agricultural strategy beyond just a rice focus of the past, toward an increasingly diversified agriculture. A strong case could be made that staying in Myanmar's past of supporting only rice will definitely not meet its growth and poverty reduction goals, so it must take the direction the Plan emphasizes.

- This diversification is in line with where demand is going both in rural areas and in urban areas, and in export markets. The fast growing demand is in meat, dairy, fish, fruits, vegetables, beans/pulses/oilseeds. The slow growing (and in the rest of Asia, starting to be stagnant) demand is in rice.
- This diversification is in line with what increases farm incomes the most diversification products earn farmers far more than rice per acre and per day.

- This diversification is in line with what creates most employment for the poor, as non-grain products are far more labor-intensive than grain crops, and require a lot more post-harvest handling that can be done by SMEs (small and medium enterprises).
- This diversification is in line with how small farmers are already voting with the own money and labor; already 55% of farmland is under non-rice products; that will rise fast over the next decade with the above trends. Rice will be mainly in the Delta and certain swaths of the Dry Zone (such as the massive paddy lands around Shwebo). In those areas we already see and can see much more intensification of and yield increase in rice.
- But even in paddy areas rice is not alone nor even the only primary option; in the Dry Zone we see many farmers cropping beans/pulses after rice and then vegetables after pulses to make a lot more money than just a rice crop. Moreover, we already see rapid conversion of paddy land into aquaculture ponds in the Delta (Belton et al. 2015) and the beginning of this even in the flooded areas of the Dry Zone in a recent reconnaissance. In short, these rice areas are starting it seems to undergo the same sequence of changes as happened in Bangladesh and India and Thailand in main rice areas a combination of intensification of rice and diversification beyond rice in the same areas.

Second, the plan focuses on supporting moving Myanmar's agricultural strategy toward thinking of input systems to enable both rice development and the development of other crops and livestock and fish culture. The key input systems the Plan focuses on appear to me to be precisely what Myanmar needs for its growth and poverty reduction goals:

- Land security and land markets are a fundamental input that the Plan targets as an input that needs to be with secure property rights.
- The Plan emphasizes water development; irrigation and water control (dams, culverts, drainage) are perhaps the most fundamental need Myanmar agriculture has to meet the growth and poverty reduction goals. With water come intensification, diversification, commercialization.
- The Plan rightly focuses on a broad range of improved quality and access to "seed" not just for rice, but improved seed for beans/pulses, breeding and hatcheries for fish and poultry, and so on.
- The Plan also focuses on developing fodder and feed sectors, and draws the right conclusions that at least maize and probably also soy will be fundamental inputs whose demand will skyrocket over the next decade as derived demand for feed for fish and chickens in Myanmar.
- The Plan rightly recognizes that labor costs are going up fast in the main cropping and fish culture areas of Myanmar, and that workers are finding jobs in the rural nonfarm sector and in urban labor markets and migration. This wage rise is great news for the poor. But for farmers it means farm cost inflation. The Plan thus rightly focuses on how to promote mechanization.
- The Plan rightly recognizes that what can be broadly called "chemicals" (fertilizer, livestock medicine, fungicides, insecticides, herbicides) will be in great demand as agriculture diversifies and intensifies and investments in and policies for improving their quality and access are crucial.

Third, the Plan focuses on all the actors in the supply chains of inputs and outputs.

- This is fundamental to moving product to markets in order to realize income, employment, and poverty reduction gains, making farming profitable and small-scale commercial, and building the investable surplus at the farm level to be able to diversify and intensify.
- This is fundamental to create employment multipliers that employ the rural poor.
- This is fundamental to linking domestic and export value chains for Myanmar to be competitive in a region where it is wedged in an increasingly integrated way as a small piece in the midst of three giant pieces (India, other Southeast Asia, and China). For perspective, Myanmar is about the same relative size and placement as the Netherlands in Europe or even Switzerland in Europe.

Fourth, the Plan emphasizes helping the small farmer, rather than large scale plantation agriculture. It is good that this emphasis is present in the Plan as this was for a long time and until recently and now a major debate in agricultural strategy circles in Myanmar.

Fifth, the Plan emphasizes the need for support institutions such as the agricultural universities and the knowledge/analysis units in the Ministry to be strengthened and for data and surveys to be much more developed. These seem to be particular needs given the poor information base about the rural areas that hold back deliberations at present. Even the formulation of the Plan has to be done with vague and partial information about fundamental patterns and behavior in rural areas and food markets.

Area of Review 2: Technical realism (alignment of resources with results) and adequacy of institutional arrangements to implement: Does it establish evidencebased feasibility, efficacy and sustainability of the proposed programs? Has the financial and economic merit been articulated by applying specific analytical tools such as cost-benefit analysis, risk assessment and beneficiary analysis?

There is some under-alignment in the investment plan's resources with the overall results desired. There could be improvements introduced to redress those alignment issues as follows.

First, there could be more emphasis on working with and finding ways to help the "off-farm components of the food system" that have already emerged and are playing a crucial role in food supply chain and rural transformation. The Plan recognizes, but somewhat underemphasizes, the extreme importance of the off-farm components of the supply chains – the wholesalers, the truckers, the processors, the agricultural services like custom combine services, the groundwater tubewell drillers, and so on. Our research and observations show that the business environment for these SMEs is fundamental to meeting farm sector growth and rural poverty reduction. Linking to these actors and finding ways to support them would further strengthen the Plan.

Finding ways to "leverage" and support those small/medium scale private investments, and build partnerships and alliances with these players, seems to me to be crucial to the success of the proposed programs. Leveraging is important and possible: we have found in our research that the small and medium enterprises (SMEs) in these segments are investing a lot already in building services for farmers (both upstream of farmers and downstream) and are perhaps the main drivers of change in Myanmar's food supply chains. Our field research in the Delta, CDZ, and Shan, shows that there is already a large amount of growth and development and transformation occurring already, including in areas where there are many poor. The document justifying the Plan underplays the emergence and existence of this mass of activity by farmers (already starting

to diversify, commercialize, intensify), agricultural services (such as the rapid emergence (outside projects and government activity) of tubewell installers and mobile combine services, for example), and post-farmgate services (such as the rapid spread of beans/pulses processors, agriculture product transport services, warehouses, wholesale, ice factories, and so on).

I see this in the Plan in several places in the Investment Plan Matrix in Pillar 3: (1) improve market and logistics infrastructure are the level of rural towns, with a major contribution by private sector; (2) establish incubators; (3) good business environment; (4) a very large sum of investment in community development initiatives and projects. In the ADS in Pillar 3 there is some fleshing out of what the latter would entail; there is mention of community (village) level storage and value-added facilities being established. Given the importance of the latter investments (in community development activities in general and apparently (I say apparently as it is only briefly discussed in the document) specifically in community-level investments in storage and processing), I turn to more discussion of the latter below.

Second, from our observations in the CDZ, Shan State, and the Delta, it is very clear that villages and rural households are very involved in labor markets, product markets, and input markets that cut across the spatial continuum stretching from secondary cities to towns to village tracts to villages. We have observed strong integration between the community/village economy and the village tract, town, and secondary city agrifood economies, such as one sees in CDZ. This integration is apparent for example in the pulse market in CDZ: when a farmer sells his/her pulses, they move from a broker who is based in the village tract or township to the district level quickly. There they are stored or sold. The same integration is apparent in wholesale and warehousing. For example, beans/pulses and paddy go from rural areas right to township level mills and/or warehouses.

One cannot thus think of and plan a program as if a community/village is in isolation; if it produces a product or service those will compete with similar products and services from other townships. Competitiveness as well of integration of activities over space in the village-to-secondary city continuum need to be taken into account, not just innate desirability of an activity. For example, as we observed in field research, the widespread and rapid development of the trader network to buy beans/pulses and move them from villages all over the CDZ and move them to the considerable and sustained domestic markets for chickpea, the green gram market in China, the pigeonpea market in India – all this network places the most modest village in a mesh of market relations. Invest in the quality of infrastructure and the policy environment of that mesh and the whole zone grows together.

There is a challenge inherent in producing value added products and wholesale/warehouse activities at village level. An overarching principal should be to first assess what processing, storage, handling, and agricultural services are already operating, what the threshold investments are for rural people to enter into them, and what sort of scale and technology is needed to compete and survive in these lines. In a rapid reconnaissance in the CDZ, we found that there are already a lot of existing services for processing, handling/brokerage, transport, and storage of rice and beans/pulses. Much of this activity appears now to be in the townships and district cities. Let us focus for example on the processing enterprises. We observed many medium and small processing facilities in these towns in the CDZ. A number of them, especially the smaller facilities, are operating below capacity and losing money or just breaking even. It is hard to believe that smaller firms operating under even more sharp seasonality, with smaller catchment

areas for feedstock, and lower capacity utilization, would be profitable. That would mean that a program that facilitated the start of many micro enterprises in rice or beans/pulses milling and oil making would probably see the great majority of them go out of business in a year or two. This is in fact what is happening in the past several years in rural Vietnam, India, and Bangladesh, as village mills rapidly disappear and these activities flourish only at the township or district city level where they can achieve minimum economies of scale to survive. Similar considerations go for warehousing and wholesaling.

It is thus important for the Program to make clear (and apportion budget) at what level (place) the processing and wholesale/distribution interventions will take place. In Myanmar, as in most developing countries, in poor areas, the majority of off-farm employment is in services, not in processing or other manufactures. This is because there are typically low entry barriers for services, and few economies of scale (which processing typically does have). In contrast to products that would require sufficient throughput and plant scale to be competitive, there are a number of agriculture-related services that include both value added processing and other services that we observed to be in short supply and very ripe for SME's in rural areas that would help the Investment Plan goals. These include:

- Upstream: Groundwater tubewell drilling and maintenance services (we observed these to be in huge demand and also already spreading for example in the CDZ); this would then reinforce bean/pulse and vegetable production goals;
- Upstream: Equipment operation, rental, and provision of services (an example is mobile combine services that are spreading quickly in rice in the Delta and the CDZ).
- Upstream: mobile labor teams for land preparation and chemical application, with proper safety gear and equipment;
- Upper-midstream: Drying, sorting, cleaning services for paddy and pulses
- Lower-midstream: Sorting and handling of vegetables, milk and fish collection, etc.
- Midstream: transport services

Third, on water, the Investment Plan and ADS propose primarily development of use of surface water, linking small scale irrigation and pumps for surface water to that. There is some opportunity there, but I think it is dwarfed by the opportunity provided by groundwater. It seems uneconomical to stretch tubes with pumps from rivers or ponds into farm lands; canals are expensive to build and maintain. The big win would be from using much more groundwater which is available to far more farmers. This should be added to the proposal in a big way.

We found in our field reconnaissance in CDZ that there appears to be a huge amount of recent investment by small farmers in their own tube wells and pumps. We found massive numbers of farmers both outside the coverage zones of surface water government programs, and even within them, to get inter-seasonal water for pulse and vegetable production. As noted above, the increase in farmers doing this is spectacular based on what we saw in widely disparate areas of the CDZ. It is also spontaneous, not based on government programs or micro lending. It is facilitated by an equally amazing diffusion of small tubewell digging enterprises.

B) HOW GOOD IS THE DESIGN FOR THE PLAN'S IMPLEMENTATION? (AREAS 3-6 OF REVIEW)

Area of Review 3: An inclusive review and consultation process: Does it demonstrate commitment to gender integration and inclusiveness of vulnerable populations? Does the plan present clear and verifiable evidence of participation by key stakeholder groups, including farmer groups, the private sector and other civil society organizations, in the preparation of the strategy and investment plan, and a mechanism to facilitate such participation in the execution of the proposed activities? Does it present a plan for engagement with the private sector and civil society organizations/NGOs?

The ADS and the investment plan went through four consultations involving farmers' representatives, government agencies, the private sector, civil society, and development partners. More consultations will take place next year. MoALI aims at finalizing both documents by the end of March 2017. It is my understanding that MoALI will consider the ADS and in particular the investment plan as a living document that will be consulted and revised every year to take into account any new developments.

An additional point is that, as noted above, I think there needs to be more engagement with the off-farm components of the food system in terms of SMEs and larger enterprises operation in post-farm segments and in agricultural services.

To help link to that community of actors, the Programs of the Plan would do best by shifting a portion of the "impact evaluation" funds to "preliminary assessment" investment. This would include starting with an inventory of the above and assessing the needs of these existing actors and services. Then the Programs could perform leveraging of what is already happening instead of reinventing the wheel by creating redundant activities at the community level and missing spurring farm and off-farm entrepreneur investment in key services that will accelerate the change that has already "taken off."

Area of Review 4: Consistency of country budgetary and development assistance commitments with the country investment plan: Does the investment plan present a feasible financing plan with respect to both resources from the country (from public and private sources) and resources from the international donor community? Has the phasing of individual programs within the plan been presented based on priorities and donor funding scenarios and a clear indication of any interdependence among projects? Has a financing "gap" been put forward on which donors are expected to make programming commitments?

From my perspective there is insufficient detailed operational information to assess well the budget presented. I have the impression that a huge number of specific activities are outlined and that to do these tasks adequately will run well beyond the modest overall budget of the Investment Plan. Either many things will be done a little bit, or there will be waves of focusing and prioritization to come down to a half dozen key actions that can be done well with this limited budget.

Area of Review 5: Adequacy of institutional arrangements for effective and efficient delivery, including M&E: Does it sufficiently describe inter-agency and inter-sectoral coordination (agricultural and non-agricultural sectors, such as health/nutrition, natural resource management)?

From my experience, institutional and coordination arrangements always look ambitious and good on paper; the test of them will be in the implementation and the effectiveness of them will depend on how practical minded and flexible the implementers are.

Area of Review 6: Coherence and or consistency between policies, implementation arrangements and delivery mechanisms, and investment areas, priorities or program objectives: Are outstanding policy issues required to achieve the desired change clearly presented? Does it demonstrate the means and capacity for effective implementation given the level of resources from the country and donor community? Does it establish, for each investment area, clear delivery mechanisms and institutional arrangements (who does what, when) taking into consideration country policies, and program objectives?

As I noted above, a large share of the success of what one can accomplish in the farm sector will depend on the integration with the actions of the actors midstream and downstream in the supply chains, and upstream in the value chains of inputs and agricultural services. If these off-farm components are stymied by poor policy or lack of infrastructure, it will be hard to get agriculture moving. It is thus important for the Program to place even more emphasis than the limited amount it does now on policies that assure a good business environment for SMEs and larger companies in these segments.

C. HOW GOOD IS THE DESIGN FOR THE PLAN'S ACTIVITIES FORMULATION & EVENTUAL EVALUATION OF RESULTS? (AREAS 7-8 OF REVIEW)

Area of Review 7: Appropriateness and feasibility of the indicators for impact and system for capacity improvement and accountability: Defines anticipated results and presents targets and standards by which performance will be assessed during Plan implementation? Presents a data collection and analysis system/plan to effectively monitor and report progress against the planned targets.

As I noted above, there needs to be a solid detailed field survey effort before launching the Investment plan in order to assess the impacts of these investments. Just doing a post-facto assessment will yield no usable information as there is very little information available on the rural areas at present beyond bare bones information. This goes especially for the off-farm components of the food system.

Areas of Review 8: Extent and quality of dialogue, (peer) review and mutual accountability system: Who is responsible for implementation and what is the accountability system for results, including peer review arrangements?

An issue is that the Plan notes that institutions like Yezin have yet to be strengthened, yet it would be the universities that should do review of results. It is not clear to me how there will be accountability without an independent neutral and strengthened university system with basic survey skills and budget to assess the Program.