

>>>> *Essentials and Accelerators* >>>>

Back in the 1960s, a lot of attention was given in international development circles to food shortages, agriculture, and low productivity and incomes of farmers. Many kinds of programs and projects were devised to try to change things – more extension workers, test-demonstrations, supervised credit, market information, cooperatives, price regulations and subsidies, improved agricultural colleges and research centers, land reform, and so on. Many conferences, papers and pilot schemes were devoted to one aspect or another. Dedicated officials and change-agents were going in all sorts of directions. But the ingredients weren't being stirred together very well, and the results weren't having as much tang as hoped.

So along came Dr. Arthur T. Mosher. He was an agricultural economist with long experience at practical levels in India and other countries. He headed a small foundation, the Agricultural Development Council, that was trying to help small farmers in poor countries, Asia especially. He put together a little book called *Getting Agriculture Moving* (New York: Frederick A. Praeger, 1966). It was simply written, so that extension workers, ministers of agriculture and others without specialized degrees could understand it. But it reflected much depth of knowledge. Mosher blended together the basic ingredients which seemed important in many countries at that time for improving small-farmer success and agricultural productivity. This and related books by Mosher had a huge influence on thinking and actions for the “Green Revolution” and rural development and such in the 1970s and 80s.

Now, 37 years later, things are better overall. The “Green Revolution” has taken place. Millions of farmers in the better locations have made productive changes. And these changes have greatly eased food shortages and rural poverty compared to what might have been. But the progressive farmers and their offspring face new challenges of price squeezes and uncertainties, changing consumer demands, technological obsolescence and environmental concerns. They will have to change their farming systems in substantial ways, and be ready to keep making changes, if they are to stay in the picture.

Then there are the hundreds of millions of impoverished tenants, women family heads and youth in marginal farming situations outside the agricultural mainstreams. Many are locked into traditional settings that still resist change. Many others are displaced victims of conflicts or natural disasters who have to start all over again “from scratch.”

So I recall *Getting Agriculture Moving* and am wondering: Will the ingredients that Mosher highlighted still do the trick? Or is there need for a new set of ingredients if agriculture in a particular setting like yours is to make sustained progress?

Mosher's essentials and accelerators

What Mosher did was distinguish between two kinds of agricultural development ingredients:

A. Five *Essentials* that were absolutely necessary if the agriculture of a locality, state or nation was to hope for a notably higher level of productivity.

Market outlets
Constantly changing technology
Access to appropriate inputs
Production incentives
Transportation

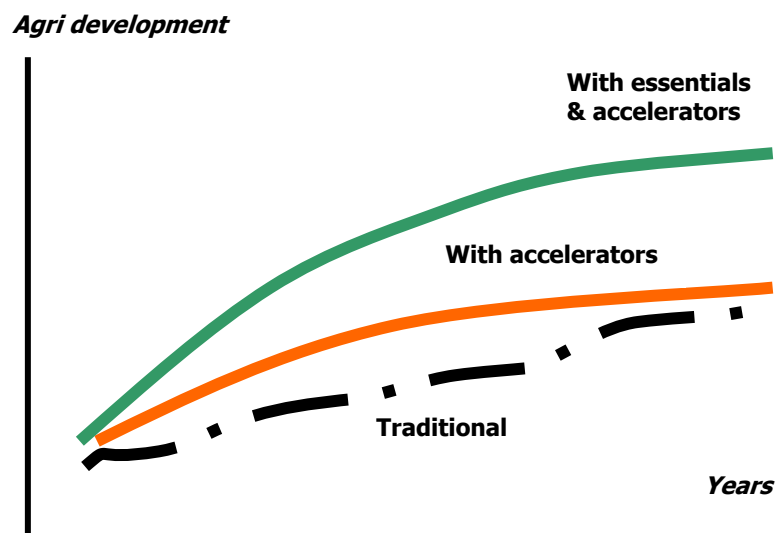
B. Five *Accelerators* that helped to speed up the extent of adoption by farmers and rural communities of available improvements in agricultural systems.

Education for development
Production credit
Group action by farmers
Land enhancement
Coordinated development planning

The reason for this distinction was that many agricultural programs had focused on one or another accelerator, but they lacked the essentials needed to boost

agricultural productivity in the first place. For example, extension programs had often been expanded to promote more production of certain crops, but they merely spread knowledge of practices already widely used. They offered no new technologies, like improved seed varieties, to enable farmers to attain

higher yield levels. And, even if farmers harvested more, many had no access to market outlets. And then they might find that low price ceilings had been imposed on commodities in the markets. Those ceilings might help consumers for a while but would cause farmers to lose money and not come back to that market another time.



What changes since then affect agriculture?

So how about now, in the early 21st century? The places that I've worked in (about 25 countries of Africa, Asia, Latin America and the former Soviet orbit) have seen some tremendous changes which affect agricultural development and the sustainability of small-farmer systems. Here's how the changes that I've seen fit into Mosher's framework:

	1960s	Early 2000s
Essentials		
Market outlets	Often markets very local, isolated. Little market information. Prohibitions against interstate marketing common.	Internal strife often impedes marketing. But more int'l trade. Cell phones and internet help mkt information. More affluence creates opportunities for niche specialties.
Constantly changing technology	Mostly from gov't experiment stations & universities. Results freely available but not very innovative. Some international research centers started.	Private corporations sponsoring much of the applied research. Results patented & pricey. Mainly for int'l trade crops. Less public funding for agri research.
Access to appropriate inputs	Small farmers had few private sources of agri inputs & services. Seeds, fertilizer, etc. distributed via gov't agencies but often poor quality, bad timing, bureaucratic.	More private agri suppliers, but geared mainly to large commercial producers in major production areas. Often not suited to small farms or ecologically sustainable agriculture.
Production incentives	Often ceilings on market prices, from consumer political pressures. Weak farmer bargaining power in dealings with middlemen.	More int'l competition, price squeezes & fluctuations for major commodities. But more affluence creates opportunities for niche specialties.
Transportation	Few farm-to-market roads. High produce losses from poor handling.	More roads but often in bad repair. Better access to int'l air transport.
Accelerators		
Education for development	Few rural people with specialized training. Many illiterate. Extension services were major programs, but often were not effective or at the cutting edge of agri development.	More rural men have had schooling & some specialized training. But not so true for females, even though farms are often run by women. Extension services even weaker. New ways to reach rural areas via TV, radio, internet.
Production credit	Gov't agri credit programs created, but inefficient, not geared to long-term improvements, & benefited large influential farmers mostly. Family savings & local money lenders were the main sources for small farmers.	More capital needed for many, but not all, technologies. Agribusiness contracts, remittances from family members elsewhere, investments by urban owners of farms common. Micro-credit becoming available for women farmers.
Group action by farmers	Cooperatives & community development seen as a way to help small farmers get credit, buy inputs, sell produce & work together but many failures. Efforts to influence state/national policies not well organized, often curbed by gov'ts.	Cooperatives or farmers' associations now seen as a way to enter niche markets (e.g., fair-traded coffee). More farmer advocacy groups & networks to influence national & int'l policies. Non-government organizations (NGOs) & inter-agency or private-public partnerships now common.
Land enhancement	Emphasized improvement of existing farm lands & expansion of farmland areas via clearing, irrigation, etc. Soil deficiencies, salinity, etc. were starting to show up when high-yielding practices were introduced.	Soil fertility losses, bad water quality, water shortages very serious in many places. Strong public concern about environmental impacts of land clearing, ag chemical use, drainage. More urban demand for land & water. "Sustainable farming" systems starting to catch on.
Coordinated development planning	Sector/regional/national planning, project-led development & large state-run enterprises were "in." Many pilot projects to speed up small-farm modernization, but often had little influence on regular programs.	Emphasis on interest groups, political debate & negotiation to generate policies, regulations, incentives affecting private agriculture. Less gov't attention to small-farmer needs or long-term development.

Let's look at this table through the eyes of people in three contrasting situations:

Farmers who are still traditional...

It appears to me that Mosher's list of essentials and accelerators is still relevant for spurring tradition-bound farming systems onto new trajectories of productivity. But *who* brings these into play and *how* they are mobilized may be different. In the 1960s, the cutting edge of agricultural development was often government-run programs and projects—or, at least, supposed to be. Now, for better or worse, private initiatives and market processes are seen to be the cutting edge in many places. You don't see so many government agency staff out there in the districts providing extension help, dispensing loans or mobilizing cooperatives. Most government workers are back in their central offices handling laws and regulations, taxes and, sometimes, subsidies and emergency helps. Most farm suppliers and processors are private, located in commercial production areas, and not very interested in dealing with smallholders in outlying places. Many of the men and young people of the villages may have left for the cities, leaving the women to cope on their own, rearing children and running the smallholdings.

But on the “up side,” one now finds more small farmers and villagers—at least the males—with basic education, travels elsewhere, and “outside” contacts. There may be remittances from family members working in the cities or even abroad that can be productively invested in local farms and agricultural services. There may be communication with central markets via cell phones that helps local farmers not to be “ripped off” by middlemen. There may even be involvement in farmer associations and non-government organizations that blend technological information with local farming experience, enable entry into new specialized niche markets, and give special attention to expanded roles of women farmers.

Displaced farm families...

Mosher was thinking mostly of long-established village situations. But, sadly, these days we find that many farm people have been pushed into refugee situations by war, drought and other disasters. They may not be able to go back to their original locations, and have to resettle. In either case, there is need to re-establish a viable agricultural system from the beginning. There may be little to start with. Basic infrastructure—housing, land rights, learning opportunities, breeding livestock, equipment, water flows, market facilities, roads, etc. may not be there. So leaders and helpers probably should focus on which *infrastructure* ingredients are most essential, and what can be done to accelerate getting these key elements in place.

To be displaced isn't entirely negative. Resettlement may provide a unique chance to break away from old traditions and barriers to improvements. It's a time when fresh ideas can be considered about land tenure and marketing systems, new ways to strengthen farmer bargaining power, ways to strengthen women's roles, new kinds of farming and non-farming enterprises, more environmentally friendly farming practices, and so on.

Farmers who have previously been innovators...

How about the farmers who made earlier “Green Revolution” innovations? Chances are that they have been producing major commodities like rice or wheat, and that they are in relatively favorable places like irrigated valleys with roads to nearby cities. Their farms may have become quite large from buy-outs of sub-marginal farmers.

But if they continue with existing crops and practices, they may face economic ruin. Seed varieties that once were at the “cutting edge” of agricultural progress may now be passe, and the new patented varieties very costly. Trade agreements may be bringing on more competition from efficient producers abroad, and price declines. There may be soil salinization or depletion, and more urban competition for scarce water supplies. More jobs in the cities may make it necessary to pay farm workers higher wages.

At the same time, there may be exciting new opportunities in both domestic and foreign markets for the innovative farmer, even if she or he has just a small farm. Urbanization and modern life styles create new kinds of demand—fresh vegetables and fruit, cheese, ornamental plants, cut flowers for export, agricultural tourism, to name just a few.

The main point is: *It's not just a matter of getting agriculture moving once and for all. Farming communities have stay on their toes and keep agriculture moving. And to keep agriculture moving, it's still important to pinpoint which essentials and accelerators are most pivotal for their particular situation.*

What do *you* think?

So these are my notions. What do you see as key essentials and accelerators for farming situations that you have been working with? Why not drop a line via email and we can exchange ideas about this.