

AGRI BUSINESS CELL

*Federal Ministry of Food, Agriculture
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AGROVILLE ENTERPRISE DEVELOPMENT

Concept Paper

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Analysis of Corporate Sector Constraints in Agriculture (ACSCA) Project

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DEVELOPMENT OF AGROVILLE ENTERPRISE PROJECT

THE BACKGROUND

Agriculture in Pakistan is the largest single sector of the economy. It accounts for 26% of the GDP and together with agro-based products produces 80% of the country's total export earnings. Over 70% of the country's labour force is absorbed by the agricultural and agro-industrial sector. However, the performance of these two sectors has been much below their real potential because of multi-faceted and multi-dimensional problems. The genesis of these problems lies in the widespread prevalence of socio-economic, technical, organizational and structural and socio-political constraints. Cumulatively, these have impeded the fuller growth of the sector beyond subsistence level with the result that the enormous potential that this sector offers for economic development has not been realized. Despite these problems and constraints, the track record of agriculture has been quite impressive and the sector has exhibited a great propensity to modernize and has reached an important stage in its development. At present, it is passing through a critical transition phase. All indicators, both quantitative and descriptive, show that this sector is ready for significant growth.

Pakistan is enriched with a good natural resource base with 17 distinct agro-ecological zones suitable for most every kind of agricultural activity. Adequate supplies of good quality water and soils, a reasonably developed physical infra-structure and large tracts of accessible fertile lands are available for intensive development.

The export market, because of its stringent quality, quantity, and price delivery requirements to distant markets, offers a longer term opportunity for an agriculture transformation in Pakistan. However, it is the domestic market, particularly for import substitution, that holds the best near term potential for accelerating the process of transformation.

There is also a growing realization that for a rapid economic development, the comparative advantage for Pakistan lies in the diversification of agriculture to horticulture, high value crops and livestock development through fuller induction of the private corporate sector for which a policy framework needs to be evolved. The policy must be grounded in the technical, economic and institutional aspects of the marketing of value added goods and the scientific production of all crops to usher in the transformation of agriculture from subsistence to a commercially viable activity.

To achieve this, the traditional role of the private corporate sector has to be enhanced to cope with the newly emerging agricultural requirements such as specialized cultivation operations, modern spraying techniques, harvesting technology and astute market development to be able to ensure the provision of total package of services rather than a single input. Furthermore, the private sector is better equipped and geared to efficiently carry out operations like transportation,

storage, marketing and process of agricultural produce in cost-effective manner.

In order to effectively penetrate the market, it is imperative that the private sector assume responsibility to carry out agricultural production operations along modern lines, especially for intensive production of fruits, vegetables, milk, meat, poultry, eggs, etc. This active role by the private sector is essential for the smooth and accelerated transformation of the agricultural economy through a strong integration of the backward and forward linkages within the farm sector. It has the capital, the entrepreneurial capability and managerial skill to introduce improved technology accompanied by significant investments in seeds, plant research, disease control, feed lots and green houses. Such agribusiness activities will increase the yield, productivity, and marketability of commodities like milk, poultry, fruits and vegetables.

A well conceived, market driven transformation leads to better processing, distribution, transportation, and farm production. Without it, any attempt to intensify and modernize the production and processing flow will be misdirected and lack essential viability. Recently, government has announced several measures to promote private sector investment in the agricultural and agribusiness market.

In consideration of the foregoing, the overall situation seems to be ripe for the private corporate sector to invest in agriculture sector, particularly in certain select types of agriculture production on a site-specific basis.

To realize this potential an integrated production unit needs to be established which will be based on processing and marketing, and eventually would serve as a model for replication, using varying economics of scale and based on the comparative advantage of particular ecological zone throughout the country. It should be an integrated production, processing and marketing enterprise, comprising all the necessary functions under one management entity to economically and effectively market and produce agriculture products to ensure that viable self-sufficient agribusiness ventures are established.

A typical privately managed and run Agrovillage would have the following salient features for accelerating the process of commercialization and industrialization of agriculture:

1. Evaluation and testing of domestic and export marketing linkages.
2. Establishment of an Integrated Model Farm with sufficient acreage of contiguous land to produce specified crops using appropriate packages of inputs and practices for commercial production, including oilseeds, vegetables and forage crops. Livestock and poultry could also be marketed through the Enterprise for domestic and export sale.
3. Installation of appropriate processing and agro-industrial facilities such as solvent extraction oilseed processing plant, slaughter and cold storage facilities, poultry processing plant, feed mill etc.

4. Provision of on-farm facilities such as warehouses, maintenance sheds, silos, offices, irrigation works and basic amenities for the staff etc.

The possibility also exists for an Agroville Enterprise to be established on large tracts of State land where areas up to 20 thousand hectares could be leased out to private corporate sector on suitable terms and conditions for establishing large commercial vertically integrated projects.

THE CONCEPT

The concept of the Agroville Enterprise (AGENT) is not a new strategy for integrated development; it has been proposed by development planners and operated by agribusiness companies in various countries. In essence it is a private enterprise hub with spokes extending out into the surrounding rural communities. The central enterprise operates a self sufficient farming - processing - marketing company which is linked to other farms that produce for its plant, and often receive from it the necessary agricultural inputs, technical assistance, and even credit. Obviously, it is an approach which demands a high level of business planning, management, investment, as well as government coordination.

THE CRITERIA

The AGENT approach to agribusiness investment and popular agricultural development requires that certain fundamental criteria be clearly identified and vigorously pursued.

1. The entire AGENT project from start to finish must be market pulled.

What is critical is not what crops can be grown and processed in Pakistan, but what buyers want that can be grown and processed in Pakistan. It is a fatal error to make investments in production and processing and then look for someone to buy the output. The secret of any agribusiness project's success is its close relationship to its market; if production and processing are market focused and receives regular feedback from customers, the money will flow in the same direction.

2. The AGENT must be profitable by farming its own land.

That is, while it will absorb the production of surrounding farms linked to it, it will not require it for achieving financial self sufficiency. The reasons are (1) the AGENT must be assured of raw material for its expensive plant facility before committing private investment funds, and (2) it must not be vulnerable to extortion from any farmers association some time in the future.

3. The AGENT must have long term control over a sufficiently large tract of land.

The company must have access to enough land to achieve levels of production that are above break even, and there must be security of long term operational control of the land that is free from outside intervention or legal entanglements. Without this security the risk of the substantial investment required are too high.

4. The AGENT must have management control over all its farming, and processing operations.

The integration of all the business activities from planting, through processing, to delivery is so complex and technical that only direct line management control can effectively deal with the scheduling, quality control, and operational problems that arise. A fragmented structure will not work.

5. Farmers in the area must have the potential capability to grow the crop to be processed.

This is the essential part of the broad rural development impact of the AGENT project. Investment in plant capacity is based not just on the agricultural capability of the company, but on the agricultural capacity of neighboring farms as well.

THE PROJECT

The Preparatory Phase

Critical question: Of all the crops which can be grown in the various ecological regions, which ones can be processed (value added) and sold both domestically and for export?

Phase objective: To identify and assess markets.

Phase activities:

1. Survey those crops grown in some quantity. Much of this information already exists in studies which have been prepared.
2. Select 25 - 30 crops based on export and domestic market criteria. (The number of crops is illustrative.)

3. Conduct a brief market profile of products made from these crops.
4. Select 10 - 15 product (or product groups) which have good market potential.
5. Conduct in depth market studies of these products.
6. Select 5 - 10 products (or product groups) which merit pre-feasibility analysis.
7. Obtain letters of intent and quality/quantity specifications from prospective buyers, and obtain price quotes from sources of equipment and technical assistance.

Phase result: The outcome will be a short list of processed food products, made from crops already grown in some quantity, for which there is an identified and interested market.

The Pre-feasibility Phase

Critical question: Of these 5 - 10 products which have the best chance of being purchased, which have the best chance of having a good start up cash flow potential in 3 -5 years.

Phase Objective: Screen out those with low business viability and identify those with high profit potential?

Phase Activities:

1. Conduct pre-feasibility studies in stages.

These will include all the business activities, equipment, facilities, and financial forecasts for each product, and would include the following: delivery, sales, storage, processing, agricultural production, management, and finance. The objective is to rank the products according to their potential feasibility. But just as important is to seek to identify quickly those serious technical constraints and inadequate financial margins in order to cull those products with no profit potential. This approach is based on the investment strategy which recognizes that while it is not always possible to discern early in the feasibility stage which agribusinesses will be successful, it is both possible and prudent to reject quickly those with very poor potential viability.

These pre-feasibility studies would follow the pattern utilized in the RONCO Oilseed Industry Concept Paper. Appendix 1 describes a sample list of subjects to be analyzed.

2. Develop plans for subsequent feasibility studies.

In the course of this work much of the essential ground work will be laid for bringing together the technical, agricultural, investment, and management components of the

project. The threshold between pre-feasibility and full feasibility is a broad and often vague line. Business judgement will need to be used in order to focus additional, but efficient, effort on those products which are of uncertain feasibility.

Phase Result: The outcome will be the identification of 3 - 5 AGENTs which have good profit investment potential because all technical, operational, and financial components have passed careful business scrutiny.

The Feasibility Phase

Critical Question: Are we ready to recommend these for investment?

Phase Objective: Complete the feasibility analysis for those agribusiness projects which have survived the selection process.

Phase Activities:

1. Complete the full feasibility analysis of each of the 3 -5 agribusinesses.
2. Identify participants in the AGENT, such as investors, equipment suppliers, bankers, and those responsible for recruiting and supervising operational management.

It is recommended that interested participants, such as local and foreign partners, suppliers, and buyers become involved in the last stages of feasibility analysis. If they are not willing to do this, at their expense, then it may not be a good agribusiness investment.

3. Survey the farming community, develop the contractual mechanism for their participation, and identify input and credit resources.
4. Refine the feasibility study into a **Business Plan**. This is a logical and necessary step; project preparation flows from the components of the AGENT project to how the project will be accomplished.

Phase Results: The outcome will be 3 - 5 AGENTs which have been proven feasible and which are now ready for commitment and development investment and action.

The Pre-investment Phase

Critical Question: What should be in place before funds are disbursed?

Phase Objective: Make all the preparations for launching those AGENTS for which their is commitment from the participants.

Phase Activities:

1. The Business Plan is completed.
2. The purchasing commitment and requirements of buyers are reconfirmed and the initial purchase orders are issued.
3. Both equity and debt financing are committed and available.
4. The ownership structure and company is legally constituted.
5. The land is legally incorporated into the AGENT.
6. Operational management is recruited and ready to begin.
7. Neighboring farmers are registered to participate in the project.

Phase results: The outcome could be as many as 3 -5 AGENT projects ready for disbursement of investment financing.

The Investment Phase

Critical Question: How soon can the first shipment be made?

Phase Objective: Achieve, as quickly as possible, cash flow from the sale of products.

Phase Activities:

1. Implementation of the Business Plan.
2. Preparation and planting of AGENT agricultural land.
3. Construction of buildings.
4. Purchase and installation of equipment.

Because of the business planning and pre-investment ground work, the AGENT has an effective strategy for executing activities in stages in order to generate a cash flow from sales to either local or foreign buyers as quickly as possible.

There will be a different implementation plan for each AGENT, but the guiding strategy remains the same: A first, test shipment of processed product should be made as quickly as possible. This not only cements the purchasing commitment of buyers, but enables the AGENT to deal with critical operational problems (of which there are bound to be many) early in the start up phase and to resolve them at low cost before they become cause additional damage.

CONCLUSION

The Agroville Enterprise Development Project is a difficult, complex, and expensive undertaking. In order to reduce the risks and achieve a profitable agribusiness that absorbs farm production from the surrounding agricultural community, it is imperative that investments only be made in self contained farming operations and in those processing operations which are obedient to the market.

A phased agribusiness and development approach is the most cost effective method for pursuing such ambitious projects. This approach is estimated to require (see attached budget) approximately 22 to 33 months at an estimated cost of \$US 1.3 million to \$US 2.0 million, which is less than 5% of an estimated total investment in 3 to 5 Agroville Enterprises of \$US 30 million to \$US 50 million. In light of the reduction of the risks and the avoidance of non viable investments, it is an approach that merits serious consideration.

Appendix: Composition of Pre-feasibility & Feasibility Analysis

1. Define the project in terms of inputs and outputs.
2. Develop a phased implementation schedule of project components leading to full integration of the enterprise.
3. Select appropriate sites for Model Farm and Seed Production Farm.
4. Determine Land/Water Resources at sites, considering
 - a. Topography, climate, hydrology
 - b. Soils classification and mapping
 - c. Land use potential
 - d. Irrigation potential - water quality, quantity and availability

5. **Develop Agronomic Plan, considering**
 - a. **Proposed crops, cropping patterns and expected yields**
 - b. **Crop build-up and rotation**
 - c. **Crop budgets**
 - d. **Availability of inputs**
 - seeds
 - fertilizers and chemicals
 - machinery
 - labor
 - fuel
 - other

6. **Develop Livestock and Poultry Plans, considering**
 - a. **Suitable breeds**
 - b. **Availability of breeding stock and/or procurement of feeders**
 - c. **Feed sources and crop residues**
 - d. **Feed Mill requirements**
 - e. **Physical facilities, including**
 - Irrigation and drainage for pastures
 - Machinery and equipment storage and repair shops
 - Poultry housing
 - Livestock holding and feed yards
 - Water and sewage systems
 - Holding and rearing sheds
 - f. **Production costs and offtake**
 - g. **Optimal Production Plan**

7. **Prepare Preliminary Engineering Design, considering**
 - a. **Processing, packing and grading facilities**
 - Oilseed extraction plant
 - Feed Mill
 - Slaughterhouse
 - Fresh vegetables handling and processing plant

ESTIMATED BUDGET

<u>Phase</u>	<u>Estimated Time</u>	<u>Estimated Cost</u> (\$US 000)
Preparatory	4 - 6 Months	160 - 240
Pre-feasibility	6 - 9 Months	480 - 720
Feasibility	6 - 9 Months	480 - 720
Pre-investment	6 - 9 Months	240 - 360
TOTAL	22 - 33 Months	1,360 - 2,040
Investment	6 - 24 Months	30,000 - 50,000
Total investment preparation as % of investment		4.53% - 4/08%