

### **ifting to a market oriented research strategy**

In Africa, research has traditionally taken a production orientation to improve yield. This strategy assumes that market demand exists for increased production and the starting point for the research agenda is the prioritisation of production constraints. Whilst this approach has been successful in the past, it is unclear whether this approach alone will continue to provide reasonable returns on research investment in the next 10-20 years. An alternative approach is to adopt a market oriented approach, where the market is the driving force in the system. In this case no assumptions are necessary and the starting point for the researcher is the identification of market opportunities for research and technology intervention. The advantage of taking a market-oriented approach to a project from the outset is that the research agenda and research themes, focus on factors which can be reflected in economic returns.

Given a project goal, which aims for increased revenue based on the sales of a particular product, the related work plans, time frames and indicators can take on an economic reality and the technology development becomes integral to the process of technology transfer. For processing projects to have the best possibility of sustainable success, there are obvious advantages in adopting a market-oriented strategy, as the work is involved with manipulating and supplying market demands. The following sections briefly describe the process of developing a market driven research agenda, towards the end goal of deploying agro-enterprise projects. The first two sections deal with strategy and the following sections detail the research issues.

### **The "Stage Gate" method for market analysis and product intervention**

Taking an agricultural product from the ideas phase to commercialisation involves a series of decisions and actions based on economic, technical and organisational issues. The "stage gate" method is a management tool designed to assist a team in developing a marketing and research plan, whilst accommodating individuals from diverse organisations / backgrounds, Figure 1. The main assumption of this process is that the project's most important determinant is profit and that the project should be rejected at any one, of a series of stages and gates, if one of the partners or "gate keepers" questions / disagrees with the viability of the plan.

The group of people that make up a stage-gate team should include a person from, research, extension, marketing, production, processing, accountancy and distribution. For a typical agricultural product this would equate to a researcher, a Government / NGO extension worker, a farmer, an entrepreneur, and an accountant / economist. Obviously, all persons should be motivated towards the success of the project, but the team should work with the understanding that the market will only accept a product that is either in demand, fills a real economic gap or can be seen to create wealth. Marketing from a top down approach or with only a missionary zeal, is unlikely to succeed.

As a prelude to the process, the team should assess all current ideas on the drawing board and conduct in-depth market research to find the level of demand for a product and the alternatives. The team should find out what is available on the market and then develop a price / season profile, a list of competitive products and an accurate cost of the new technology relative to the value adding factor. It is widely accepted that adding cost to new products is easily achieved, but increasing value and profit with a new technology is more challenging.

value and profit than a new technology, is more challenging. Successful new or improved products typically fit into two categories:-

(i) Pure added value, i.e. a product that clearly supersedes previous products,

(ii) Me Too, products that can do the same job, faster, cheaper and better

The introduction of a new "concept" product tends towards pure added value, whereas a product that is based on improved efficiency is more of a "Me Too" product. Agricultural products or technologies can include both of these activities as some products may be entirely new and others may be more efficient.

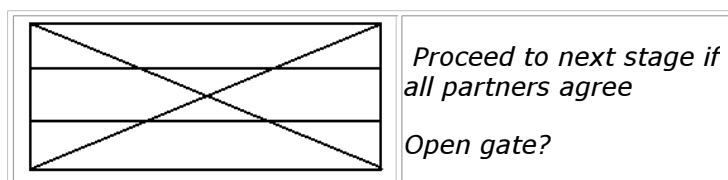
Although the stage-gate method is a useful tool to help partners focus on the market and avoid plunging into an investment in the absence of a considered economic framework, it should be noted that this method was designed to operate within a relatively sophisticated private sector system. Applying the same principles within a developing country economy requires some adjustments. As market uptake periods may be relatively long term, and consumers will take time to become aware of a new product and due to restricted disposable incomes may be cautious in adopting new products.

Hence, in addition to the purely profit driven goal, projects, particularly those aimed at small scale farmers and processors, require the inclusion of a fair degree of developmental perspective, i.e. to improve the lot of the rural and urban poor communities. Hence in addition to profit motive, the project should anticipate a slow initial rate of market impact as the project goals include broader issues such as food security, food safety, and access to high nutrient foods and the creation of new opportunities for entrepreneurs. The stage gate approach is therefore best viewed as a guide towards market intervention and this approach is extremely useful as it enables research teams to work together and change their approach or perspective towards technology intervention within the agri-business system.

### **Steps in the stage gate method a process approach to market intervention**

#### **1. Ideas assessment Collation of all ideas relating to postharvest products from a selected commodity**

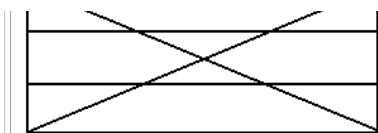
(At this stage an opportunistic approach is needed, i.e. this is not constraint driven, the group should assess all the possible products from a commodity and select those which show highest market potential. The team is working on the principle of championing a product)



#### **2. Desk study A table of strengths and weaknesses of technologies**

(There are a number of marketing checklists, which provide a series of issues, which should be addressed before embarking on a project. These include product price, competitors, distribution, seasonal effects etc.)



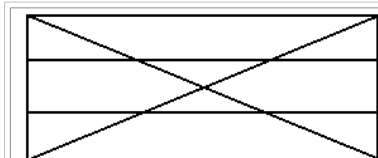


*Proceed to next stage if  
all partners agree*

*Open gate?*

### **3. Assignments Gather all relevant information especially from outside the system**

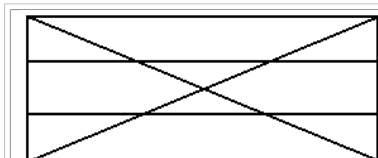
(This involves finding the common ground between the players in the group and identifying the project within the framework of local and national Mkts policy etc.)



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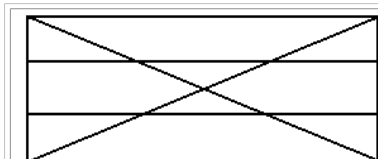
### **4. Project group Select group and composition with a lead agent / a "champion"**



*Proceed to next stage if  
all partners agree*

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### **5. Establish a pilot plant so that research and commercial partners gain information on running the scheme**

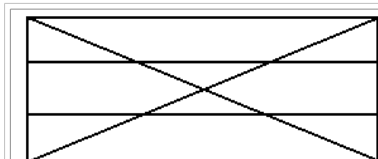


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### **6. Critical issues Assess the most precarious aspects of project, faultfinding mission**

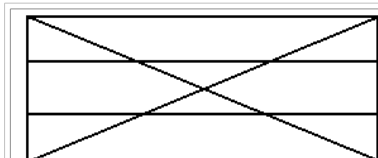
*(an accountant is crucial at this stage)*



*Proceed to next stage if  
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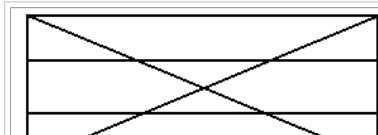
### **7. Investment proposal Need to approach partners (Private sector, NGO, Donor)**



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all partners agree*

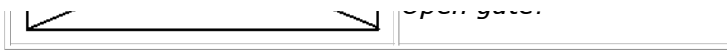
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### **8. Test marketing - Attention to tailoring the product to the market requirement**

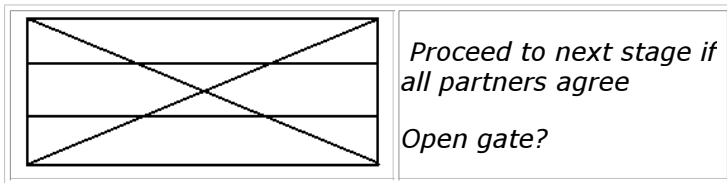


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### 9. Launch /transition Need to focus finances on sales, promotion and education



### 10. Impact Monitoring and evaluation

To absorb some of the developmental issues within an economic framework, the International Agricultural Research Centres (IARC's), particularly (CIAT), have developed an agro-enterprise approach, which is called the "Integrated project approach". This method is particularly suited to assisting small-medium scale farmers in developing countries. This more developmental approach to market intervention is described two training manuals "**Adding Value to Root and Tuber crops**" and "**Identifying and Assessing Marketing Opportunities for Small Rural Producers**". Essentially these texts guide the researcher through the stages described in the stage-gate process, involving, assessment of product possibilities, identification of market opportunities, development or adaptation of technologies, development of community organisations, pilot testing of commercial enterprises with small rural production / processing groups and the development of sustainable market linkages.

Depending on the product, the project incorporates simple sub-sector marketing procedures for market identification and evaluation, proposes participatory techniques to adapt processing technologies to specific locations and only moves to commercial teams once profitability has been demonstrated and management skills developed. Once teams show commercial viability the research / development team disengages.

This approach has been successfully implemented in both Latin America and Asia and case studies documented. Economic impact studies conducted by CIAT, show that "integrated projects" in Colombia, have generated economic benefits payoffs of US\$ 15-18, for each 1 dollar invested. This approach is being applied to projects in Africa with successful results and FOODNET will seek to promote this methodology in the ASARECA region.