

CGIAR

A BRIEF ON PAST SCIENCE COUNCIL OR TAC VISION AND MISSION RELATED STATEMENTS

SC Secretariat March 3rd 2008

This document was prepared as an input for the CGIAR Change Management Initiative (Working Group 1). It summarizes recent Science Council (and TAC) vision and mission related statements that have been included in SC (and TAC) documents, guidelines and reports submitted and in most cases endorsed by the CGIAR

1. THE CGIAR VISION AND MISSION

*A Food Secure World for All (TAC, 2002).*¹ This document summarizes the rationale as to why the CGIAR .. revise[d] its vision and strategy and describes the motivation behind the proposed changes. These include the need for more effective approaches to reducing poverty and responding to changes in the external environment in which the CGIAR operates. It presents the future vision, goal, mission and strategy of the CGIAR and the seven planks on which the future strategy should be based.

Vision: A food secure world for all.

Goal: To reduce poverty, hunger and malnutrition by sustainably increasing the productivity of resources in agriculture, forestry and fisheries.

Mission: To achieve sustainable food security and reduce poverty in developing countries through scientific research and research-related activities in the fields of agriculture, livestock, forestry, fisheries, policy and natural resources management.

Plank 1: People and Poverty focus

The CGIAR reaffirms its goal of sustainably reducing poverty, hunger and malnutrition of people in developing countries.

Plank 2: Modern Science

Mobilize the new developments in social, biological and physical sciences so as to bring modern science to bear on the often difficult-to-address causes of poverty and food insecurity, related to production and institutions that have proved intractable in the past.

Plank 3: Geographic Priorities

In determining the relative geographic priorities, the CGIAR will give highest priority to developing a concerted approach to address the needs of people in sub-Saharan Africa and South Asia where poverty is concentrated and growing.

Plank 4: Regional Approach to research

Adopt a regional approach to research planning and implementation in order to address the heterogeneous nature of the causes of poverty and food insecurity in different regions and integrate regional priorities with global priorities in international agricultural research.

Plank 5: New Partners in Science and Development

Give increased emphasis to seeking new types of partners and using new forms of partnerships to improve the efficiency and effectiveness of problem identification, research, and dissemination of research outputs for poverty reduction and food security.

Plank 6: Task Force Approach

The CGIAR will adopt a task force approach to addressing major, clearly identifiable problems where there is an opportunity for an impact to be made and/or where there are intractable problems that need a concerted approach by multiple actors and agencies within and beyond the CGIAR system.

Plank 7: Catalytic Role

Strengthen the role of the CGIAR as a catalyst, integrator and disseminator of knowledge within the overall global agricultural research system.

¹ A Food Secure World for All: Towards a New Vision and Strategy for the CGIAR. CGIAR TAC (2002). Rome

*A Food Secure World for All: Companion Paper on Priority Research and Related Activity Themes (TAC, 2002).*² Future strategic choices to be based on four broad criteria: Contribution to CGIAR goals; International public goods; Alternative sources of supply; Probabilities of success.

There is a need for a “Strategic focus on the needs of the poor” (P4): “The CGIAR’s commitment to reducing poverty and food insecurity in regions of highest incidence has implications that cut across the three production sectors on which it works.”

On breeding technologies (P6)

“Genetic transformation, allowing movement of genetic material from all life forms, will be of high priority in cases where the important traits are not available within the existing gene pools, and with vegetatively propagated crops which are difficult to breed. However, national regulations for field testing, biosafety and release will need to be in place to secure dissemination of the genetically engineered germplasm. Before major investments in this technology are warranted.”

On assistance to “other” regions: (P7)

“However, many NARS in the smaller countries of Africa, Central America and the Pacific remain weak. Opportunities to exploit research spillovers from larger to smaller NARS in terms of finished varieties and populations must be seized. Networking and the deployment of the new information and communication technologies can facilitate such South-South exchange.”

On the rationale for NRM (P9)

Sustainable food security and poverty alleviation - whether for the rural or urban poor - depend directly on the health of the environment and the natural resource base on which all food production depends. Thus *conservation and enhancement of resources and the environment are central and legitimate themes for CGIAR research today and into the future.*” [italics in the original]. Environmental research (for the CGIAR) should target “sustainable productivity improvement” and “give.. appropriate consideration for intergenerational equity of benefits” (P9).

Four aspects (amongst eight identified) for policy research in the future included: (p12)

- Legal and policy research on food, agriculture and resource use, e.g access to germplasm with respect to IPR related issues and regulation of environmental and consumer risks associated with new technologies.
- Poverty mapping and monitoring: identification of the determinants of poverty and new strategies to escape poverty, capitalising in particular on the contributions that breakthroughs in agricultural technology can make when co-ordinated with other poverty reduction instruments.
- Construction of organisational models of efficient and fair human relations, property rights and governance fostering rural development applying advanced communications and participatory approaches.
- The role of institutions in research and development on particular issues related to poverty and efficient and sustainable use of natural resources, for example in the decentralised and participatory management of irrigation water, forest and aquatic resources.

2. RESEARCH PRIORITIES AND STRATEGIES

The Science Council-led 2003-2005 consultative process for the establishment of system priorities for research responded to the same Vision and Mission statement and built on many of the same planks (if not so explicitly - see the nuanced description of the relationship between global and regional research). The research was related to the Millennium Development Goals, and adopted a more conspicuous stance towards livelihood generation and ‘high value’ crops. The emphasis was on a portfolio of global research activities. The priorities, which the CGIAR is still moving to implement, are described in a document endorsed and published in 2005³.

² A Food Secure World for All: Towards a New Vision and Strategy for the CGIAR: Companion Paper on Priority Research and Related Activity Themes. CGIAR TAC (2002). Rome

³ CGIAR Science Council (2005), System Priorities for CGIAR Research 2005-2015. SC Secretariat. Rome. pp70

The criteria considered in the development of the priorities were:

- (i) Major impact on one of the goals of the CGIAR
- (ii) Production of international public goods (and see section 3)
- (iii) Alternative sources of supply and CGIAR comparative advantage in the conduct of the research.

Particular emphasis was placed on identifying research which has a clear pathway (future food and livelihood situations) to **poverty alleviation**⁴, and which impacts many, or many groups, of the world's poor through any of the following ways:

- Increasing the production of staple foods in countries where food price effects are still important and/or that have a comparative advantage in growing these crops.
- Increasing agricultural productivity in many less-favoured lands, especially heavily populated low-potential areas
- Reducing risks in agriculture, in particular in high-value market-oriented production, and the vulnerability of rural households to shocks of both idiosyncratic and covariate nature
- Helping smallholder farms across the board into higher-value products, including livestock products, especially in countries with rapidly growing markets for such products and/or access to suitable export markets
- Increasing employment and income earning opportunities for landless and near-landless workers in surplus labour regions
- Developing more nutritious and safer foods to enhance the diets of poor people
- Undertaking agricultural research in ways that are more empowering of the poor, in particular by helping them acquire the capacity to tailor technology to their specific livelihood strategies, with particular attention to women farmers and excluded groups.

2.1 Strategic Implications for the New Research Priorities⁵

The exercise represents the CGIAR's first attempt to guide research through Systemwide priorities, compared with earlier portfolios that have been aggregated from Center priorities. There are several new elements and approaches contained in the five Priority areas and 20 specific Priorities presented in the Report which include the following:

- Within the CGIAR's continuing mission and goals, a comprehensive approach to the alleviation of poverty through agricultural research is described, and specific contributions to the global efforts to address the MDGs are identified
- The priorities reflect the mandate of the CGIAR to undertake research for development and not development activities as such
- There is an explicit focus on income generation among the poor, as well as the elaboration of criteria through which new high-value species and research will be chosen. In addition to their traditional contributions to human nutrition and services to natural and farming systems, livestock, fish, and tree products are emphasized as sources of additional income
- The CGIAR will prioritize research to raise the contribution of fruit and vegetables to income generation (and nutrition) and explore the possibility of developing of new partnerships
- There is additional emphasis on market research to promote the participation of the poor as well as to increase benefits from such participation. Quality and food safety are stressed as targets for commodity improvement, in addition to yield. Research needed by poor farmers and poor countries to meet non-tariff barriers in international trade is prioritized
- Genetic conservation and enhancement activities will be linked to focus on 'for use' strategies. New genetic enhancement approaches will encompass the devolution of breeding activities to appropriate NARS and capacity building to enhance the rate of transfer to NARS with currently lower capacity. The development of a genomics platform to help solve problems of particular importance for poor farmers and utilizing the opportunities created by molecular biology are prioritized
- There is a new major focus on improving key staples for drought tolerance
- Following the successful establishment of international in-trust collections of plant germplasm, it is opportune for additional emphasis to be placed on research on animal and fish genetic resources to support emerging international frameworks for conservation and use in these areas

⁴ *ibid* page 15

⁵ *ibid.*, page 57-58

- Also envisaged is a more fully integrated approach to the productive management of natural resources at the landscape and farm levels, with a particular emphasis on water productivity, and the avoidance of degradation and rehabilitation of degraded lands and soils
- For policy and research management, emphasis is on review, analysis, and planning of research investments for sustainable poverty alleviation, in creating operational environments for the CGIAR and its partners and the optimization of collaborative research opportunities at all levels.

2.2 The relationship between global and regional research:

It is fair to say that there has been a change in position of the TAC/SC position in relation to the intended focus and geographic balance of CGIAR research.

Plank 3 of the approaches supporting the Vision and Mission statement of 2002 talked of a “Geographic approach” (quoted above) focussing on Sub-Saharan Africa and South Asia based on current and anticipated numbers of the very poor. In 2001, TAC also published a paper⁶ which envisioned regional priority setting to which the CGIAR priorities would respond. A major drawback was the risk seen of setting the lowest common denominator in approaches to priorities that were neither global nor national. There was further lack of clarity about the mechanisms as to how regional research would be funded under such a scenario. In contrast, the document describing the new System Priorities (2005) opted for a more overtly global agenda which would find regional expression through the research context and through spillovers. For example:

Regional Emphasis⁷

“Meeting the MDGs, and the vision of the CGIAR, will be most difficult in Africa. Sub-Saharan Africa is characterized by widespread poverty, the high relative dependence of populations upon agriculture or the extraction of natural resources, the low performance of agriculture at the aggregate level, poor infrastructure, and additional challenges from human disease, climatic instability and civil unrest which serve to increase the vulnerability of large numbers of people. There is the opportunity to join in consolidated partnership approaches for the enhancement of African agriculture laid out by regional priority setting and the New Partnership for Africa’s Development (NEPAD). Global research approaches can be expected to provide relevant outcomes and spillovers to areas with common concerns (including South Asia, the West Asia/North Africa region (WANA) and some countries in Southeast Asia).”

The same document⁸ also contains a more equitable statement on the benefits of the global approach through spillovers: “In its analysis of the plausible futures for the rural and urban poor in developing countries, the SC has specifically considered regional differentiation in constraints, endowments, and partnerships. The identification of strong national programs and other regional actors to tackle issues in collaborative partnerships form an important component of determining comparative advantage and in the placement of CGIAR research. Whilst the Priorities identify important global research, it is fully anticipated that there will be different emphases in research approaches across regions constrained by different agroecologies, the distribution of poverty, and development issues. For example, priority issues identified by the different regional organizations highlight tackling water scarcity in WANA, augmenting soil fertility in SSA, avoiding land and water degradation by intensive systems in the face of population growth in Asia, and dealing with the rise of new market realities for agricultural produce in LAC. The CGIAR portfolio is well placed to contribute to these priority research efforts and, through Systemwide linkages, to provide the benefits of research through spillover to other regions. As above, CGIAR contributions will be limited to the 20 Priorities.”

The issue of the strength of NARS partners is dealt with separately (below).

⁶ TAC 2001, A regional Approach to Setting Priorities and Implementation: Towards Satisfying National, Regional and International Concerns.

⁷ The Priorities document (2005), page 11.

⁸ Ibid, page 62

In its response the Sixth External Program and Management Review of CIAT⁹ the Science Council endorsed¹⁰ the **practical linkage of global and regional research within a Center's program through the outcome line approach**. The EPMP Panel's Report describes this approach¹¹ as follows:

"An outcome line is a body of research for development that has a clearly identified impact target (e.g. improved livelihood of smallholder farmers in specific target systems of a specific region/territory). The suite of targets chosen for ...outcome lines (number and location) must be identified as part of the ...strategic planning process. This choice should be informed by analysis of rural poverty hotspots along with consideration of [the Center's] comparative advantage from its core [*viz* global, strategic] research in commodities and genetic improvement and capacity in other disciplines to intervene and aid development. In essence this process sets the integrated research agenda.... In addition to identifying target outcome lines, the strategic planning process should outline strategies and processes for initiating new, and exiting from existing, outcome line teams. The strategy process should include on-going evaluation of progress towards impact targets.

For any specific target that has been identified in the strategic planning process, the desired development impact must first be quantified. The outcome line then involves a broadly-based target system diagnosis (production systems, markets, institutions, learning networks, etc), ex ante impact assessment of potential interventions, design of potential component products and research product lines, consideration of partnerships needed across the research development continuum, and delivery action research in co-learning mode using participatory processes with key target clients. ...The approach is thus one of system-based action research and innovation that draws together disciplinary expertise as required."

High potential and degraded lands: not Either/Or

In the Priorities document of 2005, the rationale is advanced¹² for conducting research on both low potential environments and on high potential environments which are degraded or where there is evidence of falling yields. "'Low potential environments include inherently low potential areas, by reasons of climate or resource endowment. The focus of research under (System Priority) 4D includes such areas as well as those areas that have greater potential that is not being realized because of land degradation."

2.3 Mobilization of New Science¹³

A strict commodity focus has been avoided in setting Priorities. Instead, research with a system focus is promoted. The main reasons are that: (i) much of the genomics and other upstream work that needs to be done is generic and can be most effectively and efficiently carried out across related species rather than on a commodity basis; and (ii) much of the production by small-scale farmers takes place within a multi-commodity system.

Similarly, the Priorities are defined by specific goals and the likely scopes of research rather than by technologies. This stems from the SC's belief that the CGIAR should use the most appropriate research approach for a particular research endeavour. For example, molecular biology-based research including, where appropriate, genetic engineering and genomics, will play a major role in future agricultural research in many Priority areas. In the planning and development of new research programs, researchers are urged to select the most appropriate approach whether that relates to molecular biology, traditional plant breeding and related research, or agroecology.

The changing context for agricultural research and adoption of the new Priorities has strategic implications for the system. These include shifts in scientific expertise that may be needed in the system, some in different directions: (i) towards the acquisition of upstream genetic science and

⁹ CGIAR Science Council (January, 2008) Sixth External Program and Management Review of the Centro Internacional de Agricultura Tropical (CIAT) pp 121 plus Annexes.

¹⁰ Ibid Summary page viii

¹¹ Ibid pp 77 and 78

¹² Priorities document (2005) p 47

¹³ CGIAR Science Council (2005) *System Priorities for CGIAR Research 2005-2015*. Science Council Secretariat: Rome, Italy. Page 60-65.

the establishment of platforms to relate to global efforts including the private sector; (ii) integrators of NRM research and policy development; (iii) policy and legal affairs - e.g., governing IPR and the use of genetic and other technologies at the System level and amongst NARS; (iv) increased capacity in effecting institutional change; (v) new social science capacities (or linkages) in poverty analysis, and market analysis and global trade; (vi) post-harvest management and linkages to production chain expertise; (vii) research management at the consortium level integrating system skills in ITC. The CGIAR Centers, and the System as a whole, have opportunities for consolidation and partnering strategies (e.g., in the case of functional genomics, and the development of other task forces).

2.4 Advocacy

It is clear that the results from CGIAR research may have little impact in adverse policy and institutional environments, so research is therefore proposed to better understand such environments. In addition, it is argued that the CGIAR should do more lobbying and provide the advocacy needed to bring about the appropriate supporting environment - including investments in rural infrastructure, delivery systems, and many other development aspects.

2.5 Gender

It is intended that in the translation of strategic priorities into projects and programs, regional (biophysical and social) factors will be taken into account. In particular, the gendered nature of agricultural production will influence research in areas with large numbers of women farmers (e.g., SSA) and approaches to defining pro-poor traits for improvement, market chain research, biodiversity conservation, and opportunities for land tenure, amongst others.

2.6 New partnerships

It is expected that the research proposed in this Report will be carried out in strong partnerships with relevant agents. Increasingly these will be national and regional agricultural research systems. However, ARIs and agencies, the private sector, and NGOs have vital roles to play in achieving our common goals. Strategic choices in dealing with the 'other 96 percent' of agricultural research will be required with the nature of the partnerships determined by the particular research.

Working with strong versus weak NARS. CGIAR Centers work with selected NARS in their regions, and share information globally with many more. All Center programs will be time-bound and increasingly include exit strategies where the products or the program itself will be taken over by NARS. However, it is difficult to prescribe a uniform interaction given variability in the NARS, and in the biophysical and human capacity of the states concerned. The heterogeneity of NARS in terms of capacity and rates of development by region increases the complexity of interactions for the CGIAR. The existence of strong NARS accelerates opportunities for transferring aspects of research to partners and raises the requirement that the CGIAR does not duplicate existing capacities. However, the continued existence of weaker NARS in several regions means strategic choices (about the speed and staging of research, capacity building, and ensuring regional spillovers from CGIAR research) must be made according to partner strengths. Involving NARS program partners of different strengths in research consortia can assist opportunities for South-South interactions and regional spillover.

Private sector. Among the major strategic opportunities to draw the private sector into assisting the global goals of the CGIAR will be the application of private sector biotechnologies in germplasm enhancement. This demands that the CGIAR is fully aware of private-sector progress, able to access relevant technologies through partnerships, and apply them to the requirements of developing countries, particularly the poor. Elements of a successful strategy need to be integrated from Centre to System level, and through active PPP research utilizing proprietary technologies. Means to develop co-operative research on natural resource and environmental issues may be explored.

New linkages with ARIs. There are, increasingly, opportunities to source relevant research from non-CGIAR providers. In general, outsourcing of research or for example, capturing food safety, market chain knowledge and post-harvest expertise from others, is to be welcomed as part of the principle of developing new science partnerships.

The SC believes that an innovation systems approach should be pursued where appropriate instead of the traditional linear research through extension to farmer approach. As a minimum, there

should be a strong two-way communication between farmers and researchers whether at the national or international level.

Finally, options for collaborative research on each of the priorities identified in this Report should be pursued using three main criteria: (i) low transactions cost; (ii) building on existing structures; and (iii) interaction among those researchers actually doing the research.

2.7 Catalyzing new solutions

Following from the above, it is clear that in the accomplishment of the Priority research the role of the CGIAR Centers will vary according to the subject and the expertise required. The CGIAR will expect to lead global research programs in some defined areas, working with existing and new partners. It will continue to convene consortium approaches to research on important challenges with other research providers (including NARS and research institutions in industrial countries concerned with international agricultural research). The implementation of the Priority research will also require that the CGIAR augment its role of catalyst, integrator and disseminator of knowledge within the overall global agricultural research system (Figure 6). Such approaches help in building common frameworks for all players (CGIAR, NARS and other partners) to conduct research in a cooperative and efficient manner. Finally, the CGIAR's SC has an important role to play in facilitating this overall process by helping CGIAR Centers and the System itself in mobilizing the global agricultural research system around the goals of the CGIAR.

2.8 Capacity building¹⁴

The CGIAR Priorities maintain the focus of the System on research. However, the conduct of international agricultural research, combined with the provision of world-class opportunities for capacity strengthening, is a comparative advantage of the CGIAR. Enhancing capacity in developing countries has been a major accomplishment of the CGIAR in the past. This approach will continue through program-related opportunities and through involving appropriate partnerships to enhance innovation and learning. Additionally, specific research on institutions is designed to identify the best means for policies and institutions to support new agricultural research and create pro-poor benefits. All these types of program-associated capacity strengthening (i.e., integral parts of the priority research) are considered to fall under the 80percent allocation to System Priorities for research. The CGIAR's contributions to free-standing capacity strengthening, which is not an integral part of the research, is expected to be covered within the 20 percent of the CGIAR budget that is not covering System Priority research.

3. SCIENCE COUNCIL STATEMENTS ON CRITERIA AND THE CONTEXT FOR CGIAR RESEARCH

3.1 International Public Goods

The Science Council has elaborated¹⁵ on the concept of International Public Goods and the role and placement of the CGIAR in undertaking research for development. The advantages and limitations of the IPG concept have been discussed¹⁶

"Maximizing technological and economic spillovers are legitimate goals for the CGIAR. Indeed their existence provides a major rationale for the system. However these are not the only IPG attributes of relevance and they are difficult to articulate and measure, especially in an *ex ante* planning context. Proxies such as the internationality of the problems the research is intended to address are sometimes used. However even these indicators have limitations. For example in establishing priorities, how does one weigh up a problem affecting 30 small countries and 50 million poor versus a problem affecting 100 million poor in only two? Ex ante impact assessment can help, but may reveal even more potential trade-offs.

It would seem that where research activities are conducted is of little importance in terms of satisfying IPG requirements. It should not matter if it is conducted in one or many countries. What is important is that the expected outputs are *intended* to be relevant to as many countries as possible with the *intention* of maximizing international impacts via spillovers. Whether or not those

¹⁴ *ibid.*, page 58.

¹⁵ Science Council (2006). Positioning the CGIAR in the Research for Development Continuum pp98.

¹⁶ Ryan, J. (2006) International Public Goods and the CGIAR Niche in the R for D Continuum: Operationalizing concepts 1-24 *In* Positioning the CGIAR in the Research for Development Continuum pp98. Quote from P19

impacts actually turn out to be international and pervasive is of less importance than that they were originally planned to be.

Ex ante intentions are more important than *ex post* realizations from the point of view of accountability.”

3.2 Exercising the CGIAR comparative advantage in Partnership¹⁷

“For the Centers, partnerships revolve around exercise of their comparative (and complementary) advantages:

- The acquisition and mobilization of global science (at all levels, but this particularly concerns ARIs in the North and South, the large and medium-sized private sector relevant to agriculture, the funders of international science and technology).
- The conduct of project and thematic research in developing countries (with ARIs, NARS and NARES, NGOs, farmers groups and resource users).
- Raising awareness of necessary policy and associated issues affecting the future progress of agriculture in developing countries (largely with Ministries and agencies within NARS, but also with NGOs and communities of resource users, information services).
- The scaling up of positive outcomes (with NGOs, regional organizations, strong regional NARS, NARES, regional development Banks, information services).
- Resetting of the agricultural development agenda according to new possibilities. (Regional development Banks, regional organizations, strong NARS, CSOs and community organisations, information services).
- Catalyzing funding for the above (CGIAR Members, Foundations, Regional and Global agencies, national and local agencies, NGOs, information services).”

3.3 Science Council statements on IPR¹⁸

Context: “IP is complex and extends well beyond just germplasm and patents, involving: copyrights; plant variety protection systems; database rights (in Europe); trade secrets and confidential information; contractual obligations; and, trademarks and geographical indications. All have the potential to impinge on the CGIAR’s freedom to operate with the best and most appropriate technologies. Discussions and agreements at the international level on germplasm are also relevant, particularly the ITPGRFA and issues covered within the CBD, because they impinge heavily on the ways in which Centers must manage germplasm and associated IP. The CGIAR’s task is to understand IP and work within the legal boundaries while producing and distributing international public goods, which is an extremely difficult and demanding task. ... The Millennium Development Goals of the UN highlight the need to cooperate with the private sector to “make available the benefits of new technologies”. In view of emerging new legal boundaries for use and exchange of germplasm, technologies and research tools, the CGIAR System must clearly position itself as regards International Public Goods (IPG) and these new contexts”.

The Science Council on IP: “The legal boundaries for access and exchange of germplasm, technologies and research tools have changed considerably in the last decade. In order to respond to the increasing needs for IPR guidelines, tools and services, the CGIAR should strengthen its overall capacity in these areas. The CGIAR must proactively meet the challenges involved in public-private partnerships and clarify the conditions under which it will collaborate with the international public and private sectors. Inaction is no longer an option.”¹⁹

Suggestions for more coordinated and effective IP management at the System level include:²⁰

1. CGIAR Guidelines for Centers and Challenge Programs for managing and accessing IP [to be] redrafted. These guidelines should deal with all aspects of IP belonging to third parties and the CGIAR itself... [and] the scope should extend beyond germplasm issues.

¹⁷ CGIAR Science Council Secretariat (2006) Partners in Research for Development pp 25-44, *In* Positioning the CGIAR in the Research for Development Continuum pp98. Quote from P30

¹⁸ CGIAR Science Council (2006) CGIAR Research Strategies for IPG in a Context of IPR. Rome, Italy: Science Council Secretariat. page 2.

¹⁹ *ibid.*, page 8.

²⁰ *ibid.*, page 7.

2. Stewardship is key, by both the CGIAR itself and its NARS partners who will deploy the products of collaborative science. Guidelines to credible product stewardship regimes are urgently needed.
3. 'Liability', which is still not tested for biotech crops, is key in relationships with the private sector, who are likely to require a clear and stated willingness to accept liability for CGIAR and NARS actions. While issues regarding liability should be part of the above guidelines, action is needed in order to ensure clearer understanding of liability at CGIAR and NARS level.

3.4 Science Council statement on living (or genetically) modified organisms²¹

"...LMOs ... are but one facet of biosafety in the CGIAR."

"SC was keen to point out that products of transgenic breeding presented no different biosafety issues, and should be treated no differently (from the biological stand point of environmental risk or food safety) from products improved through any other breeding methodologies. It is most important that CGIAR policy does not add to the present confusion for consumers by indicating that LMO products present qualitatively different risks to the environment."²²

"It was clear, of course, that the regulatory frameworks governing the release of LMOs being put in place around the globe did require a different approach to information gathering for LMOs relative to the products of other breeding technologies."²³

"[The Science Council] supported the idea that transgenic programs designed to produce varieties or other products destined for release (rather than only research application) are associated at the outset with a business plan to meet the regulatory requirements of the NARS. This will include plans and costings for timely ..., integrated approaches ..., and research It should also include a cost benefit analysis ... and plans for the development of 'risk assessment dossiers' NARS interested in deploying LMO products should be involved in these plans."²⁴

"The SC supports the concept of "safety first research" for all breeding products destined for release on a case-by-case basis. This may include some special attention to LMOs having a high probability of eventual release, and where the results will be of general value for NARS dealing with local regulatory issues. Further, the SC encourages research on the appropriate regulatory requirements needed for a pro-poor use of the product. Inherent in this concept is that the regulatory requirements are built on a cost benefit analysis and different emphases may be required to develop regulatory regimes appropriate to market conditions and to the poor."²⁵

"...it is the intention of the SC to continue to monitor implementation of biosafety issues in the CGIAR."²⁶

3.5 Science Council statement on food safety²⁷

"The SC confirms that there is an important research agenda on food safety that concerns poor producers that is currently not being addressed elsewhere, and therefore provides a role and entry point for the CGIAR in food safety research. It will require effective partnerships to bring in the scientific expertise from various sectors of related research in order for the CGIAR to develop its comparative advantage.

"[The SC agrees] ... that a balance is struck between the dual objective of public health outcomes of food safety research with income generation for small-scale farmers."²⁸

- Food safety has to be treated as a cross-cutting issue.

²¹ CGIAR Science Council (2007) Report of the Biosafety Panel to the CGIAR Science Council on Biosafety Policy and Practices of the CGIAR Centers. Rome, Italy: Science Council Secretariat. Page vi, paragraph 5.

²² *ibid.*, paragraph 6.

²³ *ibid.*, paragraph 7.

²⁴ *ibid.*, page vii, paragraph 18.

²⁵ *ibid.*, paragraph 19.

²⁶ *ibid.*, paragraph 25.

²⁷ CGIAR Science Council & IFPRI (2007) Food Safety in the CGIAR. Rome, Italy: Science Council Secretariat. page vi.

²⁸ *ibid.*

- The CGIAR could have a comparative advantage in combining the outcomes from different types of research and applying best practice in case studies to potential markets/niches where products from developing countries have an opportunity for entry.
- There is a need for a systematic review of experiences involving poor producers, food safety and markets, whether export of local and regional. Such an assessment should include methodological review to understand the value of published case studies and to help evolve best practice methodology for the CGIAR and its partners.
- With any identified commodity/product/or market opportunity, the first approach should be to conduct a risk ranking exercise in relation to poor producers and consumers. For example , the developing Challenge Program on fruits and vegetables will need to address gaps in food safety research.
- To conduct research on factors affecting the poor, it would be better to focus on domestic and regional markets in the first instance (in the expectation that export markets could be treated later once the primary risks and constraints for the poor were understood).²⁹

3.6 Science Council statement on Ethics in research³⁰

The Science Council confirms ... that there is a need for the CGIAR at the System level to develop and adopt a uniform policy on ethical issues for the CGIAR. The guidelines and processes should follow international conventions. The Science Council believes that the development of such guidelines is a System-wide process, which should be led by the Alliance Executive/Alliance Board, in order to develop a common "Ethics codex". Guidance on the content of such guidelines, and models for the component parts, [were] provided The approach should also include recommendations for dealing with cases of serious misconduct. Subsequently, the specifics of implementation would be left to the Centers according to their particular needs and contexts, with due reference to host and partner country norms and requirements of funding agencies. The Science Council will subsequently review and endorse to ExCo the CGIAR Systemwide policy on Ethics developed by the Alliance.

²⁹ *ibid.*, page v.

³⁰ CGIAR Science Council (2006) Science Council Commentary on the Report: "Research Ethics and the CGIAR" Rome, Italy: Science Council Secretariat. page 1.