



The World Bank



**1<sup>st</sup> GRA-WORLD BANK WORKSHOP ON INNOVATION SYSTEMS  
AT THE COMMUNITY LEVEL**

*“Touching the Hearts of the People”*

**Held at the PNB Darby Park, Kuala Lumpur**

**6-8 February 2006**

## **Acknowledgements:**

Many important contributions were made by several people to make this workshop a great success, but special recognition should go to:

- 1 Dato' Sri Dr Jamaludin Dato' Mohd. Jarjis, Minister of Science, Technology and Innovation in Malaysia, who gave of his valuable time to interact with the participants to the workshop and to share his insights in this important domain
- 2 Dato' Dr Mohd Ariffin Hj Aton, President and Chief Executive of SIRIM Berhad of Malaysia, for hosting this workshop
3. Dato' Lee Yee-Cheong and Dr Anil Gupta for delivering the keynote addresses
- 3 The Swiss Development Corporation who provided funding to support the attendance of grassroots innovators at the workshop
- 4 The World Bank for their support to this initiative
- 5 The facilitator, Mr Awie Vlok of CSIR South Africa, who provided the process for the workshop
- 6 The GRA and SIRIM teams who worked together to ensure the success of the event.

## Executive Summary:

In the United Nations Millennium General Assembly, September 2000, the world's leaders adopted the UN Millennium Declaration, committing their nations to alleviate poverty, improve health and promote peace, human rights and environmental sustainability.

This 1<sup>st</sup> Innovation Systems Workshop at community level took place in Kuala Lumpur, Malaysia from 6-8 February 2006. The meeting was hosted by SIRIM-Berhad under the auspices of the World Bank and the Global Research Alliance, supported by the Ministry of Science, Technology and Innovation, Malaysia and the Swiss Development Corporation. Yb Dato' Sri Dr Jamaludin Dato' Mohd. Jarjis, Minister of Science, Technology and Innovation officiated at the workshop. Fifty delegates from 15 countries, representing scientific institutions, practitioners, governmental and non-governmental agencies and multilateral institutions, participated in the facilitated workshop.

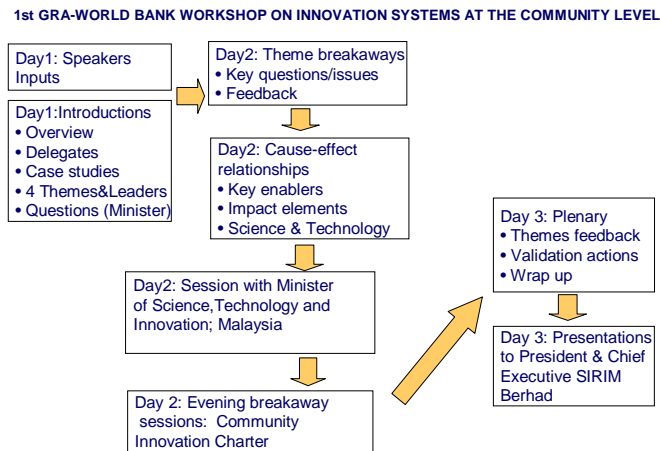
The workshop participants, in four working groups, investigated the impacts on innovation from the perspectives of industry, government, agents and communities and provided feedback to the plenary session. From the outcomes of the working groups a Kuala Lumpur Resolution of actions was developed which will be implemented in the next period of time.

The eight-point action plan, to be driven by an Innovation Systems Core Team, outlined in the Kuala Lumpur Resolution is as follows:

- 1 The Global Research Alliance, in consultation with appropriate organisations and associations, will prepare a paper for submission through Dato' Lee Yee-Cheong to Prof Jeffrey Sachs, Chairman of the UN Millennium Project, on project ideas to be undertaken by the science, technology and innovation community to assist in meeting the MDGs. The proposal will be submitted to Prof Sachs before the end of March 2006.
- 2 Undertake a Case Study on innovation systems at community level in the brassware handicraft sector in Malaysia with parallel studies in for example South Africa and India which will lead to the development of common methodologies for fostering community based innovation. SIRIM to lead on this project with a two year time frame
- 3 Identify, document and promote community innovations through three initiatives – Idea to Market – institutionally driven (SIRIM interim report in 6 months); Village 2020 – community owned (SIRIM through MOSTI 12 month timeframe); twin project Village 2020 replicated in another country (GRA next 12 months).
- 4 Capture, analyse and share the underlying logic of community innovation success stories around the world and discovering underlying logic such that they can be applied in situations elsewhere. SIRIM will lead this initiative and prepare a draft document for the S&T forum in Washington.
- 5 Review of existing innovation support funds and outline of a global mechanism to foster community level innovations. World Bank to lead and produce review by April and outline of global mechanisms in September.
- 6 Promote south-south cooperation with partner countries and institutions to share knowledge and expertise and identify projects for collaborative partnerships, example TRAMIL like the programme for medicinal plants. TRAMIL/SIRIM to lead – outline in April.
- 7 Review and propose amendments to mandate of existing institutions to enable community based innovation. MOSTI with input from Prolinnova.
- 8 Organise a follow-up 2<sup>nd</sup> Innovation Systems at Community Level workshop to review progress and identify further action before 2008.

# 1 Workshop Process

The first plenary session was devoted to information sharing by specialists in the field of Innovation Systems, including the perspectives from the World Bank. Participants were then formed into four groups to look at innovation from the perspectives of: Industry, Government, Agents and Communities. In the final session the groups made presentations to the plenary and an eight-point work plan was compiled and presented to Dato' Dr Mohd Hj Ariffin. A process map for the workshop is shown below :



## 2 Day One: Plenary Session

### 2.1 Welcoming Remarks – Dato' Zulkifly Rafique, Chairman, SIRIM Berhad

Dato' Rafique welcomed all to the workshop and urged all to take the opportunity to explore the appropriate approaches that will determine the success and sustainability of a project, and how grassroots innovation can be nurtured and accelerated through the use of the right policies when implementing national innovation systems at the community level.

Dato' Rafique went on to say that innovation is the key to the production as well as the processing of knowledge and that knowledge is the real wealth of nations. He added that innovation is about making new tools, products or processes which allow human beings to accomplish what they were not able to accomplish previously and consequently technology can be considered as the primary tool for innovation. Research and Development is also a major factor in the promotion of innovation, however innovation is not only the business of researchers but also involves everyone capable of influencing the application of knowledge to production and between enterprises.

Dato' Rafique concluded by saying that it is hoped that through bringing together a broad range of expertise and perspectives from across the world, it will be possible to identify the approaches that work and those that communities should avoid and wished all fruitful deliberation. He thanked the organising committee for their commitment in making the workshop a success.

### 2.2 Keynote Address:

#### ***Science, Technology and Innovation and the Millennium Development Goals – Dato' Ir Yee-Cheong Lee***

Dato' Yee-Cheong, Co-Chair of the UN Millennium Project, outlined the structure of the Millennium Project task forces who are working to assist in achieving the Millennium Development Goals (MDGs). He went on to explain that for the least developed countries to lift themselves out of poverty and achieve the MDGs they will need basic infrastructure, indigenous SMEs and added that without basic infrastructure and local Science, Engineering and Technology base, indigenous industries cannot upscale and the economy cannot uplift.

He further reported that it has been agreed that with global support for the MDGs, poverty reduction through economic development will be achieved, especially if Science, Engineering and Technology communities in developing countries work to make innovation the pathway to achieving the goals,

Dato' Yee-Cheong urged the GRA to investigate the possibilities of working with the World Association of Industrial and Technological Research Organisations (WAITRO) to present proposals based on the outcomes of this workshop for presentation to Prof Jeffrey Sachs for possible support.

The full text of Dato' Yee-Cheong Lee's presentation will be put on the GRA website in due course.

### **2.3 Keynote Address:**

#### ***From Sink to Source : Poor as Provider of Innovations, Knowledge and Institutional Values – Dr Anil Gupta***

Dr Anil Gupta, who is actively involved in innovation at the grassroots level, covered issues regarding acknowledgement of sources of innovative knowledge and added that since the poor people are ready to share knowledge they remain poor. He outlined methods of implementing incentives.

Dr Gupta stressed that the first step in the process is trust and that since often innovators are not honoured and students do not learn about them, the mindsets are not right. He outlined ways in which national governments can deal with this challenge through identifying local champions, empowering these individuals and the maintenance of a national register of grassroots innovations and traditional knowledge. In addition it is important that the policy environment for the protection of people's knowledge is in place, funding for open source technologies and the inclusion of lessons from unaided innovations as well as traditional knowledge in the curriculum at school level.

Several examples of innovative products were shown and Dr Gupta closed by saying that it is essential to find synergy between the three elements of the golden triangle of creativity, i.e. innovators, enterprise and investment.

The full text of Dr Gupta's address will be available on the GRA website.

### **2.4 *Perspectives from the World Bank : Innovation for Development – Mr Nicolas Gorjestani, World Bank***

Mr Gorjestani stressed that innovation is not the exclusive domain of the rich countries, nor of the rich in poor countries and that local communities may be poor materially, yet they are often very rich in the indigenous knowledge systems that help sustain their livelihoods. He cited examples of where simple existing technology, through innovative application has greatly assisted rural communities, e.g. by equipping birth attendants

with walkie-talkie equipment which can link to medical expertise, maternal mortality has been greatly increased. He also urged that innovation must not only be for the community but also by the community.

Mr Gorjestani presented some challenges for definition by the workshop participants, including: how to foster an environment that promotes innovation, what are the roles of the important stakeholders in this process, what are the lessons of experience with funding innovation, where and how can these ideas be tested/piloted and how will be measure success.

He concluded by saying “Stay in by staying out” – leave space for creativity.

The full text of Mr Gorjestani’s presentation will be put on the GRA website.

### **3 Knowledge Sharing by Participants**

Several participants to the workshop shared their experiences regarding innovation at grassroots level summarised as follows:

#### **3.1 Betty P del Rosario – Asia Pacific Association of Agricultural Research**

- Cannot only teach the skills – also need to support the forming of networks, marketing and scale-up
- There are challenges of getting technology and communities to work together
- Issues of where innovation is funded and who benefits

#### **3.2 Anton Krone – DURAS project, South Africa**

- Great ingenuity exists among local innovators
- There is a need to form the linkages between grassroots innovators and the private sector and scientific support
- Partnerships should be formed to maximise the sharing of innovation

#### **3.3 Dr Pratap Shrestha – LIBIRD Nepal**

- Small scale pilots with small funding
- Innovation by farmers developing new strains of rice

#### **3.4 Boyse Piillay, CSIR South Africa**

- Project using sisal to produce seats for Daimler Chrysler
- Example of movement from the market to the community along the value chain

#### **3.5 Chales Mburu – Kenya**

- Use innovators as facilitators in user groups

#### **3.6 Dr Lionel Robineau – TRAMIL, Caribbean**

- TRAMIL’s goals and objectives are the scientific validation of traditional health practices based on criteria for safety and efficacy
- Although TRAMIL is popular it is also Scientific and although TRAMIL is scientific it is also popular

### **4 Breakaway Sessions**

The participants were formed into four groups, namely:

- Industry/Business

- Government
- Agents e.g. Universities
- Communities

The brief to the teams was as follows:

- 1 Briefly define some key terms
- 2 How to foster an environment to enhance innovation
- 3 Compile a list of do's and don'ts
- 4 Capture lessons of experience with funding organizations
- 5 Identify where and how above ideas could be tested or piloted
- 6 Measures of success
- 7 Formulate no more than 5 questions for the Minister of Science, Technology and Innovation who will join the meeting tomorrow
- 8 Appoint someone to give 10 minutes of feedback.

## **Day 2: Plenary and Breakaway Sessions**

All four groups shared the results of their first breakaway session and the facilitator then tasked the groups to consider further:

- 1 A description of any cause/effect relationships that emerged
- 2 Build these relationships into a community innovation check list, flow chart, model or framework that can be used by newcomers to the field
- 3 Update the earlier list on identifying where and how these ideas could be tested or piloted

The groups were further tasked with:

- 1 Reaching management decisions
- 2 Formulating a programme of work that can be implemented by the GRA/World Bank partnership (project proposals etc.)

## **5 Inputs from the Malaysian Minister of Science, Technology and Innovation *YB Dato' Sri Dr Jamaludin Dato" Mohd. Jarjis***

The Minister addressed the plenary session, welcomed everyone to Malaysia and spoke about the importance of innovation as a key theme for the country. He referred to the National Innovation Council chaired by the Right Honourable Prime Minister. This Council will formulate a comprehensive innovation agenda and institute a national innovation system to enhance competitiveness and resilience through science and technology programme for the next five years. Malaysia has moved into the knowledge economy and is currently engaged in their Ninth Five-year development plan, which requires innovation. The Minister added that It is very fitting that the workshop should take place in Malaysia. The Minister spent time with each breakaway group.

The Minister further added that one has to ensure benefit to rural communities and also that through, or in association with the World Bank and the Global Research Alliance, the corporate sector in Malaysia can also be brought into the fold.

Mr Gorjestani said that the workshop was aimed at stimulating creativity at community level. Together with their partner, the Global Research Alliance, the World Bank are learning as there are no clear cut answers yet. He expressed the hope that the

workshop will produce 2-3 concrete measures to stimulate innovation at community level. He spoke of the importance of innovation by communities rather than for communities and said that it was very appropriate to have the workshop in Malaysia.

Dato' Yee-Cheong Lee said the MDGs require a Global Research Alliance and expressed the hope that the GRA in association with WAITRO will collaborate in relevant global initiatives. SIRIM is the common link and he hope that a Malaysian initiative could be launched as the country was keen to become a global R&D hub.

## 5.1 Presentations by workshop participants

Three presentations were made by workshop participants, as follows:

5.1.1 **Presentation by Esbern Friis Hansen** – describing a study being undertaken for the World Bank to review Innovation Support Funds. This study will identify the fund management system, the fund implementation system and experiences with support mechanisms.

5.1.2 **Presentation by Torsti Loikkanen** – describing the Finnish system of innovation

5.1.3 **Presentation by Carsten Hellpap** – describing GTZ's new focus with regard to introducing new technologies into developing countries.

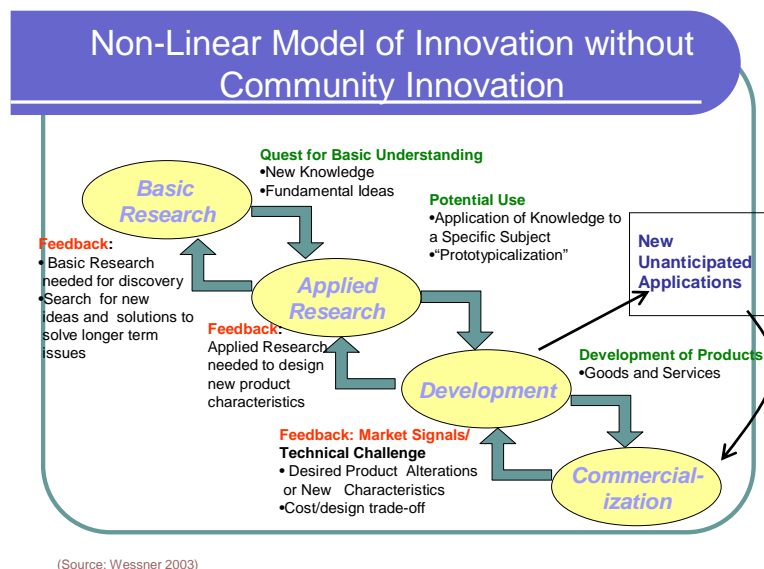
These three presentations will be published on the GRA website.

## Day Three: Plenary Final Presentations from Working Groups

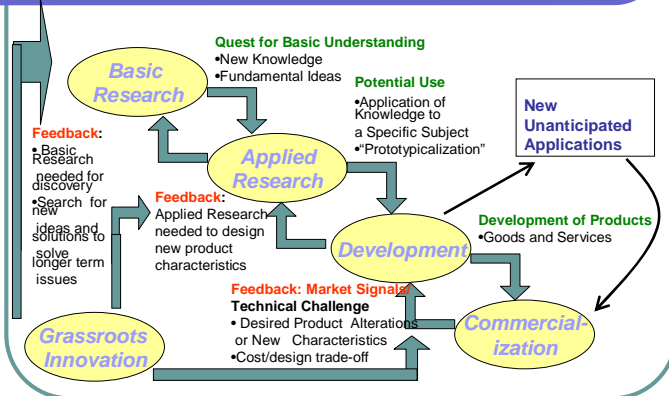
The final presentations from the four working groups were made to the plenary session.

## 6.1 Industry/Business

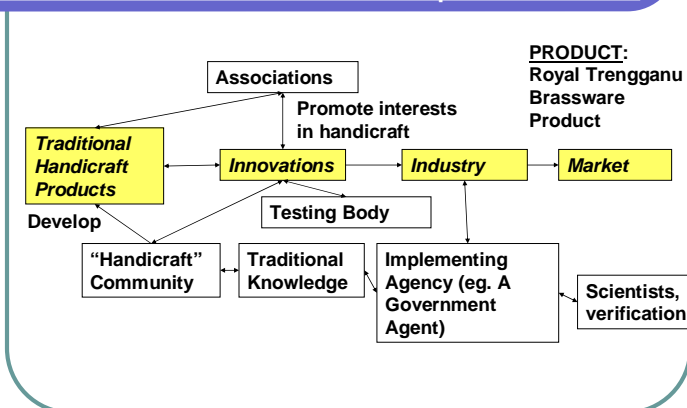
The Industry/Business Group made the following presentation:



## Non-Linear Model of Innovation



## “Handicraft” Community Cause-Effect Relationship



## Case Example – Steps Ahead

- Baseline Information on Innovation
- Recognize opportunities for innovation
- How to strengthen the innovation
- Capture and document tacit knowledge in handicraft work (e.g. boat building)
- Design innovation
- Global market

## Community innovation checklist

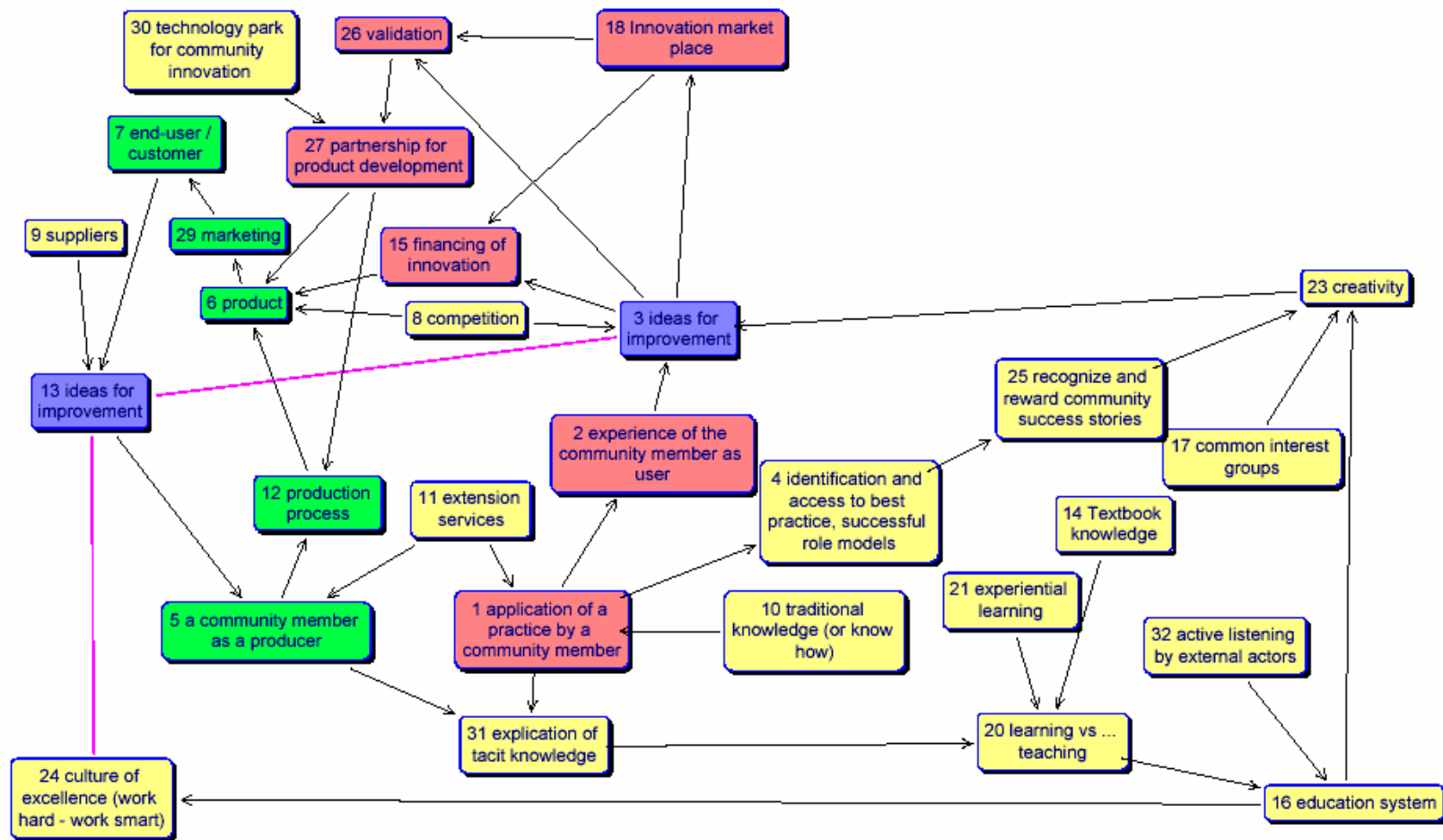
- Community as the source of innovation (consider scientists as part of the community and not as a separate entity)
- Identify community innovators at early stage (e.g. competition amongst schools)
- A body needed to evaluate and commercialise existing innovations
- There must be a dedicated department within the ministry to manage community innovators
- Mentorship at the community level is needed

## Programmes/Projects

- We propose parallel case studies in different GRA member countries
- Traditional handicraft case is proposed as Malaysian case study – other cases to be decided from other GRA member countries (Africa, Europe...)
- Common methodology, criteria, objectives to be developed / decided

### 6.2. Government

The Government Group presented an interesting model showing concepts, constraints/problems and response from different sectors. Below please see the model and on the following pages the description of the elements of the model.



**Government Group: Innovation at Community Level Model**

	Concept	Constraint/ Problem	Response			
	Community level Innovator		Government	Private Sector	Intermediary (S&T, NGO/CBO etc.)	Community
1	Application of a Practice (technical/ social/ organizational) by a community member	Capacity to use and maintain current technology	Funding for capacity building	Improve/ simplify technology; technical services	Advisory service User to user learning	User to user learning
2	Experience of Community Member as User	Experience not shared; not documented; not accessible; deficiencies not made explicit		Customer service	Community based mechanisms to share and document experiences (field days, rural fairs etc.); institute feed back loops	
3	Ideas for Improvement	e.g.; methodologies, information; education; traditions and conventions; mindsets;	16, 4, 25 Information/ Education/ Communication	Provide information platforms	Information/ Education/ Communication	Cafes; Markets, Well; places of worship; trust building
18	Innovation Market Place (Reflection)	Lack of Exposure; and cooperation and institutional organization	Review regulation for producer organizations, Innovation Market Place;		Showcase successful practices (competence centres)	Cafes; Markets, Well; places of worship; trust building
32	"Active listening" by external actors	Mindset; cost, lack of approaches	Incorporating IK/ local knowledge into Curricula and training enhancement	Bioprospecting	Scouting	Document stories, myths, success stories, practices
26	Validation	Access to/ inefficient use of resources; mindset; lack of methodologies	Resources; IPR protection		Mobilizing user-innovator - researcher collaboration	MoU with R&D on Material Transfer Agreement/ Benefit Sharing Agreements
27	Partnership for product development	Language/ education/ social barriers; mistrust;	Create level playing field by for a and	Collaborative R&D projects	Collaborative R&D projects; proof of concept	Collaborative R&D projects

		mindset;	avenues to share; resources; fiscal incentives for PS to engage with Communities			
12	Production process	Quality control; process control; transportation; scaling-up; Risk taking capacity, IPR-infringements; lack of skills	Setting and implementation of Standards and Norms; fiscal incentives; skill development program; integrating education system (dual system?)	Investment; appropriate financial services; apprentice ships	27; Training and technology support, patent analysis, competence centers	Formation of organizations (S& L groups, asset sharing, etc.)
6	Product	quality, price, functionality, wrong target market, volume, IPR-infringements,	marketing assistance (information and promotion), business matching, IPR-enforcement	marketing assistance	patent analysis, technology support, competence centers	Formation of organizations (S& L groups, asset sharing, etc.)
29	Marketing	missing marketing and distribution network; lacking concept of customer relationship	conduct exposure fairs; real time market information systems;	real time market information systems; peer-to-peer exchanges	Formation of producer cooperatives; capacity building; peer-to-peer exchanges	peer-to-peer exchanges
15	Financing of innovation	Access to credit, finance, risk;	Credit subsidies; Endowment financing;	Risk sharing arrangements;	Endowment financing; management and monitoring;	(S& L and investment groups, etc.)
8	Competition	Homogenous clusters of identical types products(?); cheap imports	Zoning; Tariffs	Contracts; value addition	Contract production	Producer cooperatives; finding niches; value addition
4	Identification and access to best practice,	Information access; delivery of	enable information	Provide information	Provide information platforms, provision of funds	Provide information platforms

	successful role model	information (local languages); lack of funding	access, 25, provision of funds	platforms, provision of funds		
25	Recognize and reward community success stories	Mindset; "NIH" - Syndrome;	Contests; fairs, awards; Estate taxation patenting	Media campaigns; IEC; awards; Estates	patent assistance;	Building trust; documentation (prior arts)
13	Generation of ideas for product improvement	Lack of finance; lack of culture of excellence; lack of interaction with customer	Standards	Producer organizations	Professional organizations	
5	Community member as a producer	Inadequate entrepreneurial skills; liquidity shortages; lack of collateral; low negotiation power; no capital; "production and investment climate" geared towards larger businesses; poor economies of scale	target enterprise development; support/ set up innovation/ "venture" capital; set up sustainable funding mechanism;	provide micro-credit and other small and micro enterprise financing opportunities; provide "business angel services"	skills training; documentation and dissemination of "lessons learned/ successful practices	Networking; clustering
24	Culture of excellence	complacency; educational system not performance oriented;	campaigns: "Work hard - work smart; re-orient education system; rewards, incentives; exposure opportunities	Apprentice ship programs on all levels;	Advocacy; fairs	Knowledge sharing;

### Criteria for a project selection

- quick win
- feasible
- high potential
- participatory
- manageable
- manageable risk for innovator
- location
- high visibility
- measurable (high) impact

### Project ideas

#### Project A - Malaysia: "From Idea to Market"

- Scouting/ competition
- Inventory of successful practices and community based innovations, showcases,
- Complement SBIC (strategic business intelligence centre) of SIRIM with community wing (documentation/ information exchange)
- Innovation Market place "Show what I know" / Award / Private Sector Commitment to take three products to market.
- Measure Impact/ Results
- Share Results at S&T Forum in September 2006 in Washington

#### Project B Malaysia "Village 2020" A Community Owned and Managed Innovation

- National Competition for the implementation of an innovative idea (product process, service etc)
- Commitment of government, private sector etc. (whole country) to provide resources upon call of community
- Proper PR to cover/document it by the community itself with help of students in the field (participatory video)
- Bring idea to market (something that can be sustained with the resources of the community)\
- parity-composed steering committee (community/politicians/scientists)

#### Project C Twin project Malaysia/any English-speaking country (TBD) (Africa)

Repeat process of project B in another country (south/south-cooperation)

### 6.3. Agents

Agents include universities, schools, media, R&D organizations, NGOs, community-based organization (CBOs), networks, financial institutions including donors.

### Possible contributions of agents to create an enabling environment to promote innovation

#### **Key questions:**

1. What are the major constraints for innovation processes at community level?

2. How can agents help communities to overcome these constraints?  
(Suggested framework and ways forward)

Identify existing constraints as presented by community

### ***Innovation Model***

Private enterprise is surrounded by knowledge systems, government, funding systems, media, management and capacity building services, and technology providers but there is a need for a support structure. Some constraints are:

1. Knowledge and information
  - Access to knowledge: lack of information systems at public level, IPR
  - Inadequate knowledge: poor sharing of knowledge, primary education low, community access to secondary and adult education
2. Partnership
  - Communication between innovators and with agents/ stakeholder levels (language/ cultural barrier)
  - Poor cooperation between inventor, community and entrepreneur
3. Management
  - Lack of management know-how and backstopping
  - Poor management and entrepreneurial skills at the grass root level
4. Funding
  - Community lack information on funding source, direct access to funding agencies
  - Funding mechanisms and procedures too bureaucratic (inappropriate)
  - Resources, e.g. lack of funds for development, validation, pilot introduction, marketing of innovations
5. Recognition and promotion
  - Lack of recognition of the value of community generated innovations
6. Technical support
  - Technical know-how/ backstopping
  - Lack of understanding of local context by agents
  - Lack of technical capacity of agents to effectively interact
  - Lack of technical or advisory service; culturally not appropriate

### ***How can agents help communities to overcome these constraints?***

The following are recommended framework elements for designing pilot projects

1.
  - Document, disseminate and make accessible innovative ideas
  - Facilitate access to knowledge at the community level
  - Introduce value of community innovation for agents working in formal education and skills training
  - Encourage information innovation at community meetings etc.

2. Partnership
  - Collaboration/partnerships between community and agents (fusion of knowledge systems)
  - Identify coordinating mechanisms at community to community level, agent to agent level and agent-community level to promote coordinated collaborative efforts
  - Sharing of results
  - Promote formal and informal networks
3. Management
  - Build management and entrepreneurial capacity of innovations
4. Funding
  - Create new mechanisms
  - Create access to funding information
  - Public private innovation funds
5. Technical Support
  - Sensitise and train technical stakeholders
  - Establish and promote technical advice and support system

Classical systems are not always appropriate as they are based on profit seeking. Since there are possible innovations that will not become economically profitable in the short term there is a need for a new model. This new model should be focussed on socio economic and or public good. The interaction between different innovation systems should also be promoted.

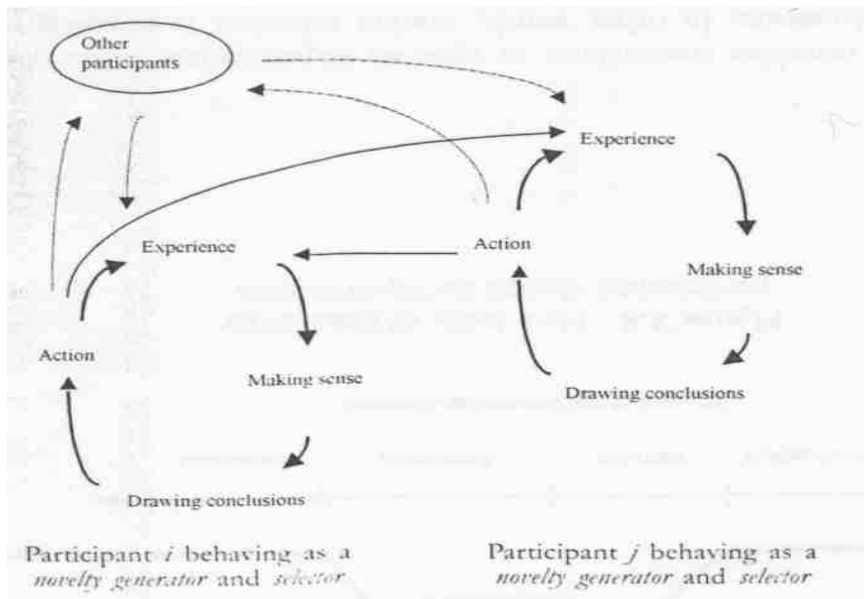
#### **6.4. Communities**

##### **Definitions**

- Innovation as “learning selection process”
- Community : local level heterogeneous groups/people
  - ✓ Experience from Africa
  - ✓ Malaysia more homogeneous
- Innovation system – incubation as a hub to encourage innovation
- Knowledge
  - ✓ 3 forms of indigenous knowledge
  - ✓ Local & researchers– scientific

##### **Learning Cycle**

This is shown on the following page:



### Key contributions to enhance community level innovation

- Africa
  - ✓Learning groups – external facilitators – self selected
  - ✓Need to empower people & to enable them to articulate informed demands
- Malaysia
  - ✓bring in private sector donation of facilities thru' incubation process
  - ✓Public sector support programs – grants etc
- Human capital develop – less repetition encouraging experimentation & innovative thinking
- Enabling policy to support local innovation & private sector development in poor rural areas
- Visionary leadership & champion(s) supporting innovation programs

### Lessons of experience with funding

- Malaysia
  - ✓A mix of gov't & private sector funding based on supporting business model
- Africa
  - National
    - ✓Project based donor funding
    - ✓Lack of gov't support
    - ✓Need for continuous flow of support
  - Local level
    - ✓Support for creation/stimulation of innovative environment not project application model
    - ✓E.g. FFS, CIAL

### Measures of Success

- Participatory Monitoring & Evaluation
- Institutional Learning
- Accountability

- Develop indicators
- Establish baseline information
- Adequate reporting

### **Emphasis**

- Innovation is necessary to respond to poverty, hardship, e.g. food security for very poor & accessing markets for the poor
- The focus could be on social & economic results that flow out of the community
- It should bring the essence of entrepreneurship/ venture at the community level & be done in various ways:
  - ✓Creating opportunities for champion(s)
  - ✓Facilitate an empowerment process to innovate
  - ✓Need for a 'catalytic facilitation' process
  - ✓Enable rural producers to organise
- There is a need for facilitation capacity to catalyse & support people in innovation in various ways:
  - ✓Learning selection opportunities & cycles (e.g. Farmer Field Schools)
  - ✓Brokering relations with different opportunities/ ideas, e.g. micro-finance
  - ✓Training, including micro-enterprise training
- This should be a (people) demand driven process (with local support)
- Improved opportunity structures of:
  - ✓Infrastructure, funds, talents, knowledge, sector policies, business eco-system
- Need to promote/ facilitate partnership models (NGO/Private/Public sector) for generation & consumption of innovative ideas with commercial values
- Need to have an appreciation & understanding of local assets & capabilities

### **Proposals**

- There is a need to document innovations and understand the variables & logic
- But there is a need for action in the form of:
  - ✓Pilot innovation projects: *Prolinnova, SIRIM, ?*
  - ✓Documentation of learnings and dissemination through networks (*international & national*)
  - ✓Building of models of innovation
  - ✓Exchanges
  - ✓Review of current experiences
  - ✓*Research into enterprise development processes: from innovator to commercialisation - market logic/ commodity chain development*

### **Implications**

- There is a need for a global fund/ mechanism to support these activities
- Occurring through international and national activities and funds
- Globally governed by a secretariat of key stakeholders (e.g. Prolinnova)
- Managed by virtual secretariat of specialists

### **Fund Objectives**

- To support regional/national/local ISFs
- To enhance quality of support mechanisms

- Enable capacity building
- Development of social & economic models
- Assist with sustainable funding strategies of innovation support (*e.g. endowment funds, revolving funds*)
- Provide a hub for exchange of experiences between ISFs & knowledge-based networks & institutions (e.g. Global Research Alliance & SIRIM, CGIAR, etc.)
- Links to innovation databases: *collate all experiences for dissemination*

### **Links to Malaysia**

- Interest from Malaysian government in developing a commercial/ economic innovation programme
- Alongside a socio-economic fund focused on poverty and vulnerability

## **7 Plenary Session – Closure**

A Innovation Systems Core Team comprising members from the four focus groups was appointed and they compiled The Kuala Lumpur Resolution, outlining the actions emanating from the workshop. This Resolution was handed to Dato' Dr Mohd. Ariffin Hj.Aton, President and Chief Executive of SIRIM Berhad.

Dr Biesenbach of the Global Research Alliance outlined the journey already taken in the Indigenous Knowledge domain as an example of the journey now beginning in the domain of Innovation Systems. He went on to say that it is important to keep interest high and to have some quick wins and sustainability. He thanked all concerned with the workshop and particularly the delegates for giving of their valuable time.

Dato' Dr Mohd.Ariffin Hj Aton closed the meeting with some observations. He felt that the inputs from the groups could be divided into two parts, one being input into the innovation system and the second being projects. The information from this workshop will be fed back to the Minister.

Dr Ariffin went on to say that there is a need to describe exactly what is meant by funding and it would also be important to define impoverished as this could be a relative term.

Dr Ariffin thanked all for their undivided commitment. The Minister was impressed with the discussions on this not easy topic, especially as we are often not aware of how the other 90% live. The challenge for government is in the deep rural communities. Dr Ariffin expressed the hope that they could host another workshop in Kuala Lumpur to review results.

See below a copy of the Kuala Lumpur Resolution.



The World Bank



## KUALA LUMPUR RESOLUTION

In the United Nations Millennium General Assembly, September 2000, the world's leaders adopted the UN Millennium Declaration, committing their nations to alleviate poverty, improve health and promote peace, human rights and environmental sustainability.

The 1<sup>st</sup> Innovation Systems Workshop at community level took place in Kuala Lumpur, Malaysia from 6-8 February 2006. The meeting was hosted by SIRIM-Berhad under the auspices of the World Bank and the Global Research Alliance, supported by the Ministry of Science, Technology and Innovation, Malaysia and the Swiss Development Corporation. Yb Dato' Sri Dr Jamaludin Dato' Mohd. Jarjis, Minister of Science, Technology and Innovation officiated at the workshop. Fifty delegates from 15 countries, representing scientific institutions, practitioners, governmental and non-governmental agencies and multilateral institutions, participated in the facilitated workshop.

At the heart of this initiative are innovation systems by communities.

Actions emanating from the workshop include:

- 1 The Global Research Alliance, in consultation with appropriate organisations and associations, will prepare a paper for submission through Dato' Lee Yee-Cheong to Prof Jeffrey Sachs, Chairman of the UN Millennium Project, on project ideas to be undertaken by the science, technology and innovation community to assist in meeting the MDGs. The proposal will be submitted to Prof Sachs before the end of March 2006.
- 2 Undertake a Case Study on innovation systems at community level in the brassware handicraft sector in Malaysia with parallel studies in for example South Africa and India which will lead to the development of common methodologies for fostering community based innovation  
SIRIM to lead on this project with a two year time frame.
- 3 Identify, document and promote community innovations through three initiatives – Idea to Market – institutionally driven (SIRIM interim report in 6 months); Village 2020 – community owned (SIRIM through MOSTI 12 month timeframe); twin project Village 2020 replicated in another country (GRA next 12 months).
- 4 Capture, analyse and share the underlying logic of community innovation success stories around the world and discovering underlying logic such that they can be applied in situations elsewhere. SIRIM will lead this initiative and prepare a draft document for the S&T forum in Washington.

- 5 Review of existing innovation support funds and outline of a global mechanism to foster community level innovations. World Bank to lead and produce review by April and outline of global mechanisms in September.
- 6 Promote south-south cooperation with partner countries and institutions to share knowledge and expertise and identify projects for collaborative partnerships, example TRAMIL like the programme for medicinal plants. TRAMIL/SIRIM to lead – outline in April.
- 7 Review and propose amendments to mandate of existing institutions to enable community based innovation. MOSTI with input from ProInnova.
- 8 Organise a follow-up 2<sup>nd</sup> Innovation Systems at Community Level workshop to review progress and identify further action before 2008.

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