



**PROMOCIÓN E INVESTIGACIÓN DE PRODUCTOS ANDINOS  
PROYECTO DE MEJORAMIENTO PARTICIPATIVO**



**MANUAL TÉCNICO DE MEJORAMIENTO  
PARTICIPATIVO PARA OBTENER  
NUEVAS VARIEDADES DE PAPA**

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# CONSERVE

## Community-based Native Seeds Research Center

- **Collected 300 Farmer Varieties Rice (conservation)**
- **Core samples screened for upland and lowland sites: (1993) 20 identified with good food quality and yield (without chemical inputs)**
- **Farmer trained in crossing and selection and stable and segregating lines distributed widely among communities**
- **Highest yielding 5.8 tons/ha versus 4t/ha MVs**

# **BOHOL, Philippines**

## **Crop Genetic Resources Enhancement of Yam**

- **Collected yam varieties: 8 from local farmers, 32 from country's main genebank, and 5 from regional research station**
- **Distributed to 66 farmers-- for field trials**
- **Farmers evaluate for adaptation/performance**
- **Farmers evaluate for cooking quality and taste**
- **Result: farmers prefer local– over introduced**

<u>Intermediary Impacts</u> <b><u>LIBIRD-NARC Nepal</u></b>	<u>Examples of description of specific impact</u>	<u>Examples of specific indicators and measured impacts</u>
<b>Effects on farmer acceptance</b>	<b>Higher level of farmers' initial acceptance of PPB products.</b>	<b>Farmers have identified 3 varieties Rampur Composite, Pop-22 and Resunga Composite</b>
<b>Effects on farmer-held diversity</b>	<b>Farmer held diversity increased</b>	<b>Number of maize varieties in village increased from 8 to 11 in 2 years.</b>
<b>Effects on farmer breeding/seed processes (technical/social)</b>	<b>Farmer seed selection skills enhanced Positive impact on local crop development process</b>	<b>65 + 545 farmers participated in mass selection training and large numbers in project area start pre harvest selection using mass selection technique.</b>
<b>Effects on how local people organize/manage crop development</b>	<b>Farmers Research Committee (FRC) formed to plan, implement and evaluate the project</b>	<b>FRC is able to plan, implement and evaluate the project activities with minimum contribution from the researchers. FRC is able to hold farmers meeting, organize Farm Walk and Focus Group Discussion.</b>
<b>Effects on how formal research Organizations organize Breeding/seed</b>	<b>Research station started to work on farmers Agenda (Institutionalization )</b>	<b>Collect of maize landraces for inclusion in breeding program and work on developing lodging resistant varieties initiated.</b>
<b>Effects on empowerment</b>	<b>Self-sufficient breeding objective Farmers involved in project are helping to convince new farmers about program FRC of two research sites decided themselves to make reciprocal visits</b>	<b>Farmers have initiated breeding program (to add good traits of Thulo Pinyalo into Rampur Composite.) FRC is planning to develop local technical resource personsl. FRC have planned to form seed producer group for production of their own maize</b>

# Farmer-led 'PPB' Science Elements

- **Some elements same as 'novel' Formal-led PPB science**
  - **Decentralization of screening sites**
  - **Use of local germplasm**
  - **Farmer evaluation and choice**
- **Greater emphasis on FARMER science skill-building**

## *However*

- *New scientific methods not being developed (yet) to meet community growing use of PB themselves*
- *New support strategies not being devised (yet) for formal breeders to serve/play secondary support role to community-led work*

# **Farmer-led PPB: Impacts**

## **Quality of Science and Participation**

- **Substantial process gains at farm level**
  - **Skill building**
  - **Control over germplasm**
  - **Goals setting (?)**
- **Some product gains– (but fewer/longer-term horizons- less well documented)**
- **Participation and Gender Analysis not well documented**
- **Potential opportunities/gap areas for key advancements**
  - **Scientific methods and approaches– for building on farmer skills**
  - **Scientific (formal) support roles– for meeting community driven needs**

**Farmer-led PPB– should and can be impressive growth area**

**MOVING FORWARD : COMBINING THE BEST OF**

**FORMAL-LED and FARMER-LED PPB?**

# **New Horizons**

## **Intellectual Property Rights and Ethics in PPB**

**Team:** Plant Breeding Group, Lawyer, Social Scientist /Ethicist

### **Themes:**

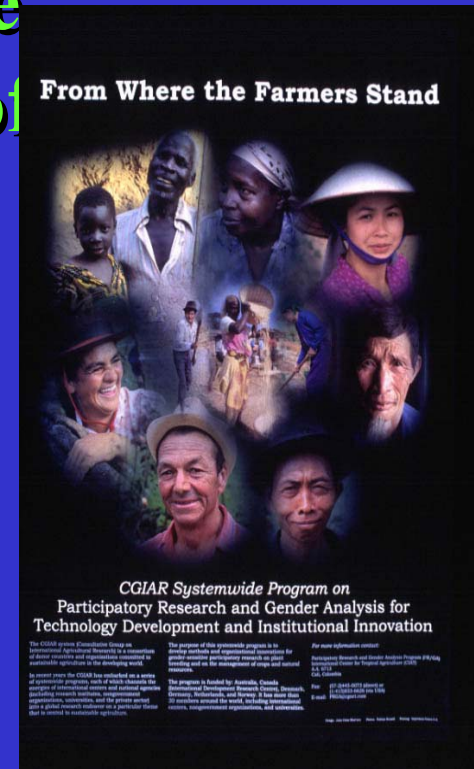
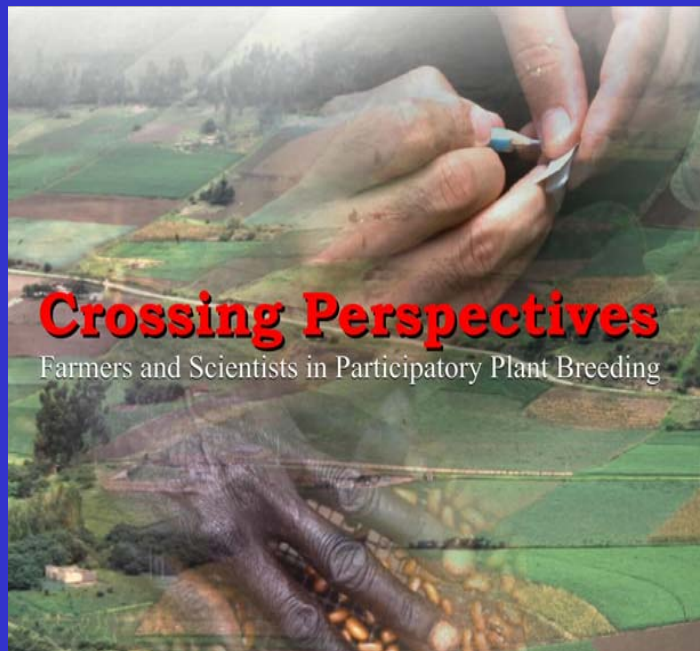
- **Broad obligations of each party**  
(legal, ethical, best practice)
- **Germplasm ownership issues**  
(recognition of contribution to creative process)
- **Distribution rights**  
(recognition of rights to move seed)

**(PRGA, Leskien and Sperling, 2001)**

**PPB: concrete signals for  
institutionalization**

# CG Quality of Science in PPB Workshop Sept 2002

TAC review recommends PPB be considered as an “organic” part of all plant breeding programs



**Recognition by CG that PPB has distinct intellectual property rights issues— which have to be explicitly addressed (April 2002)**

**CG POLICY TRAINING MANUAL  
on IPR for NARS: PPB Module**



## **Reflections on PPB: Linking Quality Science and Quality Participation**

- **Formal-led work, institutionally, has effected broad changes in ‘how science is done’ (process changes)**
- **Formal-led PPB work, at farm level, has made tremendous product strides: yield/biodiversity**
  - **(process/participation need strengthening)**
- **Farmer-led PPB has very impressive process gains at farm level (skill building )**
  - **(product and science needs strengthening)**

## **Reflections on PPB: Linking Quality Science and Quality Participation (cont)**

- **Farmer-led and Formal-led PPB approaches—  
absolutely complementary- not competing.**
- **In both, Quality farmer-oriented science and Quality  
Participation have to be developed together— mutually  
shaping each other**
- **Cross-fertilization can and will take place— but vital  
policy changes (eg IPRs) need to be addressed—  
explicitly and visibly.**



**Thank you**