LI-BIRD, Pokhara based NGO

Established: Oct 1995

Governed by Executive Board headed by chairperson

Executed by Management Team headed by ED
Goal

We create and increase opportunities for sustainable management of natural resources and biodiversity that reduce poverty and improve livelihoods of resource poor and marginal people across Nepal through participatory research and development.
Objectives

• Capitalize on local initiatives in conserving and utilizing biodiversity through participatory research and development programme

• Improve the quality of life of the resource poor through income generation activities and increased food security with an emphasis on equity, gender and environmental issues

• Contribute to policy framework
Approaches

**Participatory:** In technology development, dissemination and scaling up. LI-BIRD encourages and values farmers initiatives, knowledge and innovation in planning, implementation and monitoring and evaluation of programme and projects.

**Collaboration/networking:** LI-BIRD fundamentally works through partnership and collaboration with diverse partners at different levels: grassroots, national and international, and through networking with them.
FOCUS AREAS

• Biodiversity and Natural Resources management

• Participatory Technology Development

• Livelihood, community development and Poverty reduction

• Dissemination, Awareness, Advocacy and Policy

• Training
Geographical Coverage

- Completed projects: 67
- Ongoing projects: 24

- In parts of 20 districts directly
- In parts of 37 districts indirectly
LI-BIRD's Sphere of Collaboration

Universities (international)
University of Wales and University of Reading, UK, NORAGRIC, Norway, Cornell University, USA

Donors
DFID (PSP, HARP, LFP, LPP), IDRC, IFAD, IPGRI, PRGA, GTZ, Plan Nepal, Care Nepal, SDC, CIMMYT, Shanti Griha, Sainsbury Trust, Dev Fund (Norway), DGIS, IUCN

Regional networks
SA-PCI (GTZ), UDRA, MSSRF, CLACC, ICIMOD, UPWARD

Government extension agencies
DoA and its networks (RADs and DADOs), MoFSC, DoF

CGIAR
IPGRI, PRGA/CIAT, ICRISAT, CIMMYT, IRRI, CIFOR

Farming Communities/CBOs /FGs/Cooperatives

Private Entrepreneurs
Shital Agro-foods, Karmacharya Traders, Taja Pauroti, MAdhav's Café, Annapurna Bakery

(NGOs)
SSMP/ HELVETAS, HKI, CARE Nepal, Plan Nepal, ETC, IIRR, USC Nepal

Government line agencies
DLSOs, DFOs, DSCOs

NARC
RARS, ARS, Divisions and commodity programme

Universities (national)
IAAS and IoF/TU, PU
Human Resources

Professionals and Officers  26
Support staff  38
Facilitator/Motivators  25
Interns  1
TOTAL  90

- 29% professional, 40% female and 55% field based
- Representing 12 ethnic groups from all over Nepal
Food Security through ricebean research in India and Nepal

Roles and responsibilities of LI-BIRD
• Documentation of national distribution of rice bean
• Analysis of local knowledge of rice bean diversity and uses from selected study areas
• Field evaluations for agro-morphological traits of rice bean diversity
Rice bean project activities by LI-BIRD in Nepal
Germplasm collection (Geographical coverage)
## Germplasm collection summary

<table>
<thead>
<tr>
<th>SN</th>
<th>Organization</th>
<th>Districts</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Support Foundation</td>
<td>Achham, Bajura, Baitadi, Bajhang, Dadeldhura, Doti, Darchula, Surkhet</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>LI-BIRD</td>
<td>Kaski, Palpa, Gulmi</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>RAS-Nepal</td>
<td>Dang, Salyan, Pyuthan</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>NARC</td>
<td>Nuwakot, Kavre</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
About trial site

- Darbar Devisthan VDC-2 of Gulmi
- Located at Western development region of Nepal
- The area is dry and is dominated by sloping Bari land
- Rice bean is common as intercrop with maize in the area
- Altitude 1300 masl
<table>
<thead>
<tr>
<th>Activities</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of varieties</td>
<td>153 (by farmers name)</td>
</tr>
<tr>
<td>Land preparation</td>
<td>as per farmers practice (2 plowing)</td>
</tr>
<tr>
<td>Date of seeding</td>
<td>15\textsuperscript{th} and 16\textsuperscript{th} of June, 2006 (2063/3/1,2)</td>
</tr>
<tr>
<td>Design and plot size</td>
<td>Non-replicated OBN; 2 rows of 2 M length (16 plants/plot)</td>
</tr>
<tr>
<td>Spacing</td>
<td>RR 1 m and PP 50 cm</td>
</tr>
<tr>
<td>Weeding and stacking</td>
<td>3 times; and staking by Bamboo poles for indeterminate vars.</td>
</tr>
<tr>
<td>Manure and fertilizer</td>
<td>FYM as per farmers (7.5 tons/ha)</td>
</tr>
<tr>
<td></td>
<td>No chemical fertilizer applied</td>
</tr>
<tr>
<td>Name of collaborating farmers groups</td>
<td>Resunga Multipurpose \textit{Sirjanshi Farmers Group} (Mr. Prithvi Bdr. Karki)</td>
</tr>
</tbody>
</table>
Data collection

1. Date of planting
2. Date of flowering
3. Date of Maturity
4. Plant height at Maturity
5. Growth habit
   (Determinate/Indeterminate)
6. Flower colour
7. Pod length
8. No. of pods per plant
9. No. of seeds per pod
10. 100 grain weight
11. Seed colour
12. Total grain yield per plant
13. Insect/pest occurrence
Preliminary observation

• Among 156 samples collected, some early maturing landraces found to be like cowpea or blackgram (Determinate growth habit)
• 40 landraces have either no germination or poor growth
• Date of flowering ranged from 66 to 112 days
• Majority of Rice bean landraces are now at Pod filling to maturity stage
Constraints

• Timing of project initiation: Limited collection of germplasm from across the country

• Inconsistency in farmers naming and mixing up of species (e.g., black gram, cowpea)
• Germination
  ➢ 40 landraces were either not germinated or had poor growth

• Insect:
  ➢ Blister beetle (*Mylabris* spp) incidence at flowering stage (2nd week of Sept.) of rice bean crop (flower bud damage)
  ➢ Paradol@2ml/lit (Mithyle parathion) is applied to control the pest after 84 days of seeding (13th Sept.)
Thank you