KNOWLEDGE AND EXPERIENCE SHARING SYMPOSIUM

Towards Highly Rewarding and Inclusive Flood-based Livelihoods

Agroforestry And Livestock Management through use of Flood Water and Construction of Earthen Water Ponds in Flood-Based Livelihood System (FBLS) in Pakistan

4\textsuperscript{TH} TO 8\textsuperscript{TH} MARCH, 2019

VOI WILDLIFE LODGE, TAITA TAVETA COUNTY, KENTA
Pakistan’s Geographical Context

Country Governance structure

Federal Government

Provincial Governments and its areas:

- Balochistan Province 347,190kms²
- Sindh Province 205,344kms
- Punjab Province 140,914kms²
- Khyber Pashunkhawa 79,280kms²
- Gilgit Baltistan 72,971kms²
- Azad Jammu & Kashmir 13,297kms²
## Country Dry land context

<table>
<thead>
<tr>
<th>Region</th>
<th>Area</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>7 mhec</td>
<td>30 district – low, high, desert &amp; coastal</td>
</tr>
<tr>
<td>Forest Cover</td>
<td>1.97%</td>
<td>Asia 20%</td>
</tr>
<tr>
<td>Balochistan</td>
<td>4.68mhec</td>
<td>4 district - low land &amp; desert</td>
</tr>
<tr>
<td>Sindh</td>
<td>0.55mhec</td>
<td>4 districts - low land</td>
</tr>
<tr>
<td>Punjab</td>
<td>0.57mhec</td>
<td>6 districts – low land</td>
</tr>
<tr>
<td>KpK</td>
<td>0.86mhec</td>
<td>2 districts &amp; surrounding rain fed areas</td>
</tr>
<tr>
<td>Federal</td>
<td>0.27mhec</td>
<td></td>
</tr>
</tbody>
</table>
Pakistan

Agriculture and Livestock Sector

Agriculture (Crops, Livestock, Forest and Fisheries) contribute 20.9% to Gross GDP.

Coefficient ratio of sub sector – livestock 56.3% (11.8%)
Forest - 0.4%
Fisheries - Not Counted out of scope
Households dependency - 88 Million in Pakistan
Agriculture and Livestock - 70% (Rural Population makes livelihoods from Agriculture and Livestock).

Note (Balochistan is higher dependency with 70-80% reported)
The Spate Context - Pakistan
The context
The Context
The Context
Priority Areas in Country Context
Spate Irrigation Systems Zones

Pakistan has 4 types of major ecological zones:

Desert – in south west and south – sandy deserts with low rain fall
Arid and Semi Arid – with moderate rain fall
Tropical and sub tropical – Humid in monsoon range
Highlands – with snow fall and glaciers

Priority for future business is proposed for Arid-Semi Arid zones that are dependent on hill torrents short duration flows, surface run off with large arid wastes mainly in (Entire Balochistan Province, Piedmont area of Sindh in 4 districts) Province.
Main Development Plan

Gully Plugging

Earthen Excavated ponds for livestock and vegetation

Making Oasis in the plain to retain water and plantation

Eye brow type check dams

Nursery raising in association with Provincial Forest Department and local communities.

Plantation of trees

Wilds grasses, shrubs Seeds collection, and broadcasting

Care and maintenance for at least 2 years
The Terrain

MIDLANDS

DRY LANDS
The Terrain

SANDY DESERT (PIC JAMALI)

SANDY DESERT (PIC JAMALI)
The Terrain

HIGHLANDS

HIGHLANDS