

GOBESHONA 4

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Building local climate knowledge

Nutrient-rich fisheries enhancement in seasonally flooded rice fields in Southern Coastal Bangladesh



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Presentation Outline

- **Background**
- **Objectives**
- **Study area**
- **Installment of fish microhabitat**
- **Results**
- **How the solution would address the problem?**
- **Conclusion**

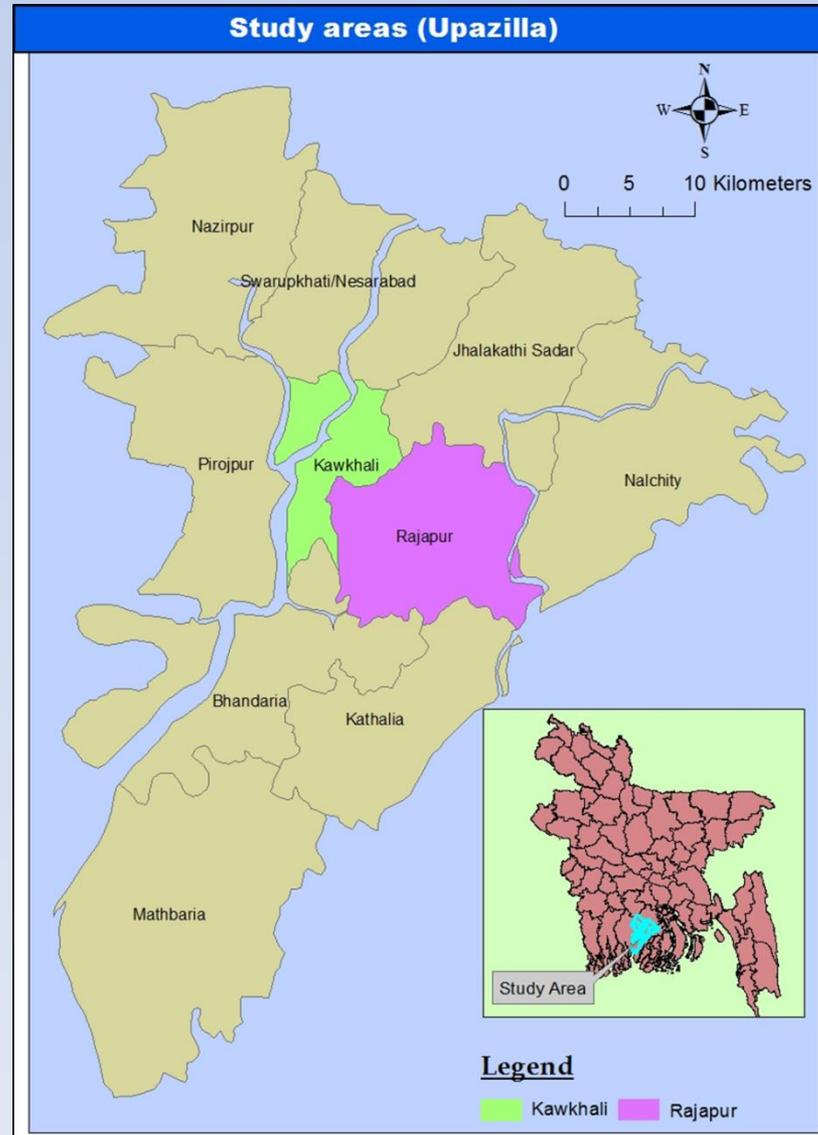
Brief background

- Bangladesh enjoys increased seasonal rice yields
- But aquatic species migrating into the floodplains during the monsoon floods are decreasing
- Fish production and biodiversity is also decreasing

The present study was conducted in Southern Bangladesh to enhancing small indigenous species (SIS) in rice fields through microhabitat development.

Objectives

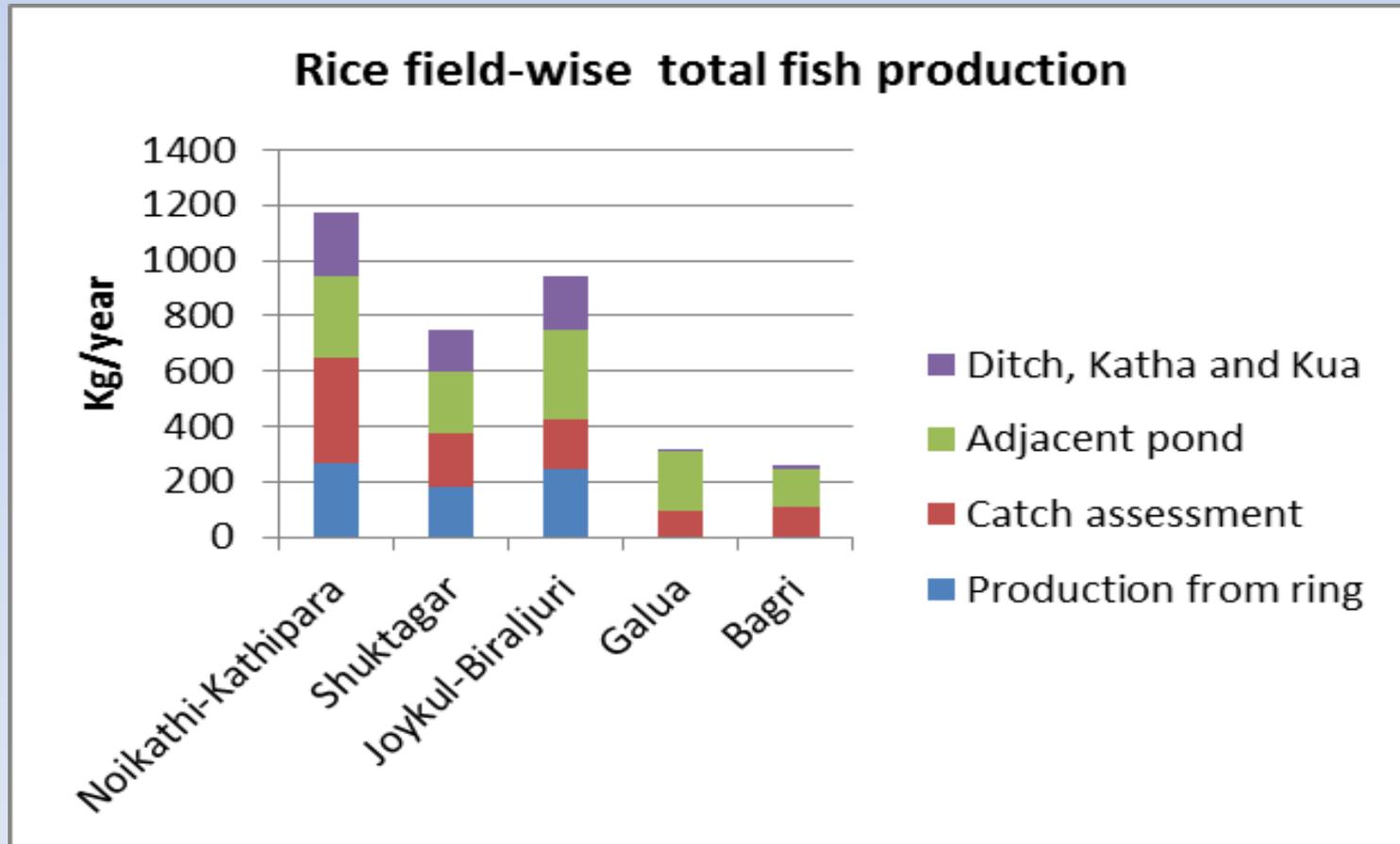
- To increase nutrient-rich indigenous fish production, biodiversity, income and consumption
- To develop an appropriate model for broader impacts and
- To encourage the participation of women for greater equity in sharing of benefits and empowerment



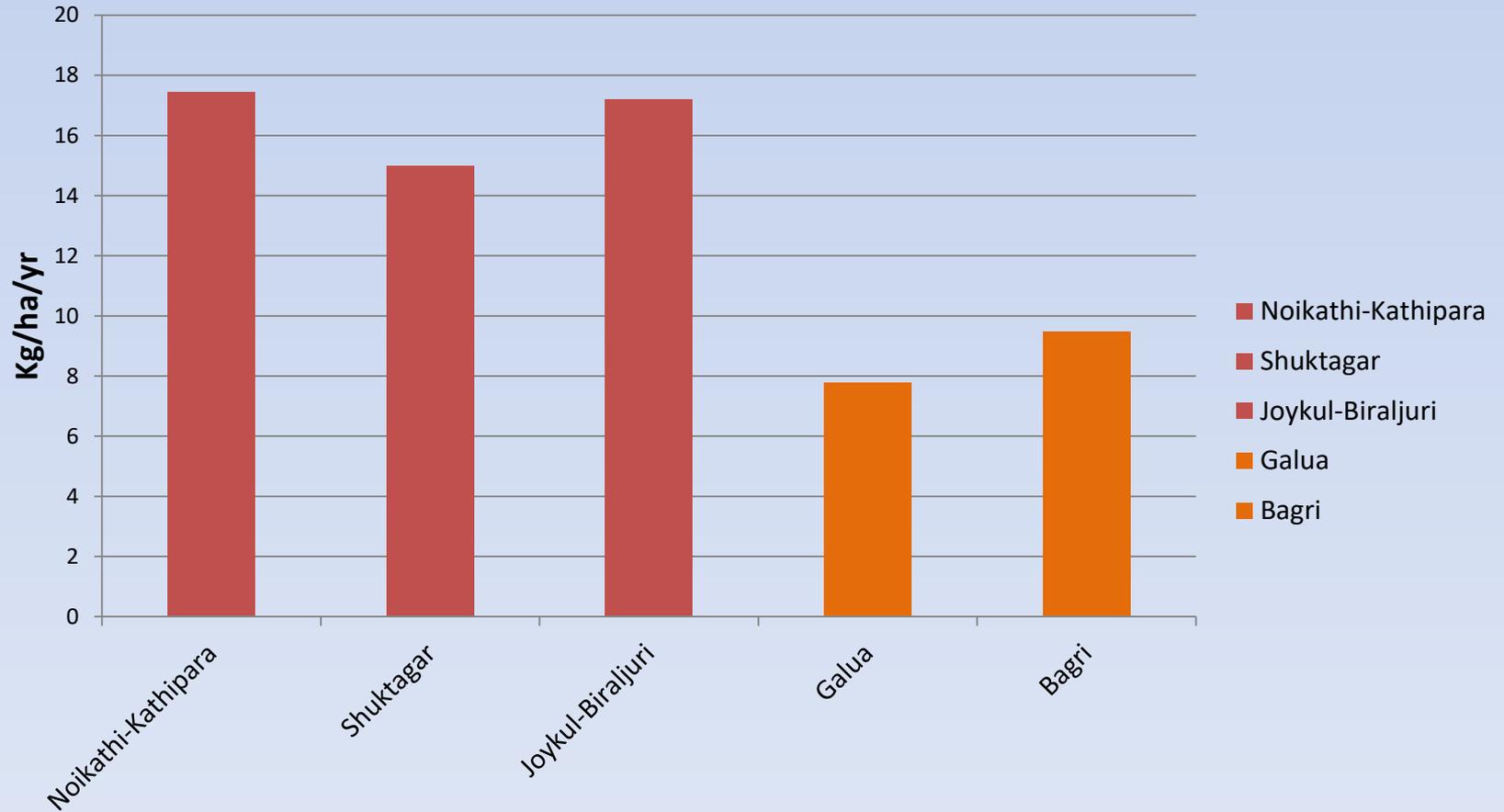
Installment of fish microhabitat

Based on area a total of 110, 88 and 92 sets of three rings (76cm diameter and 1m deep) were installed in Noikathi-Kathipara, Shuktagar and Joykul-Biraljuri respectively

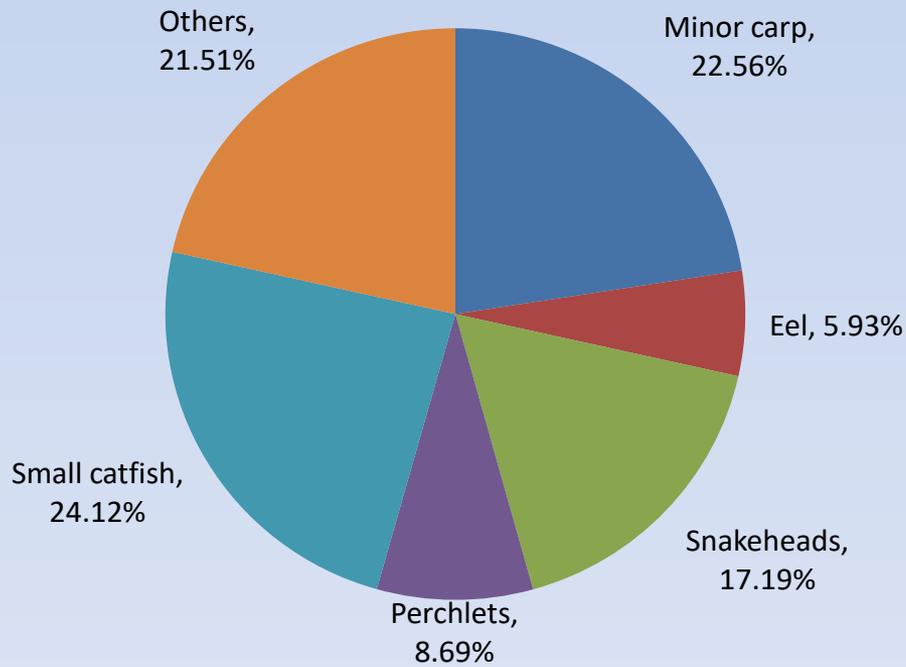
Results



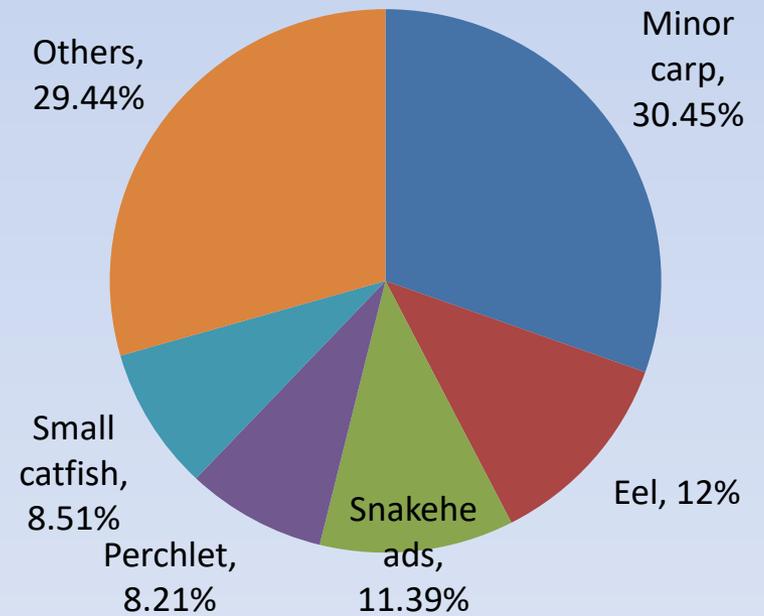
Rice field-wise fish production distribution



Result Cont.

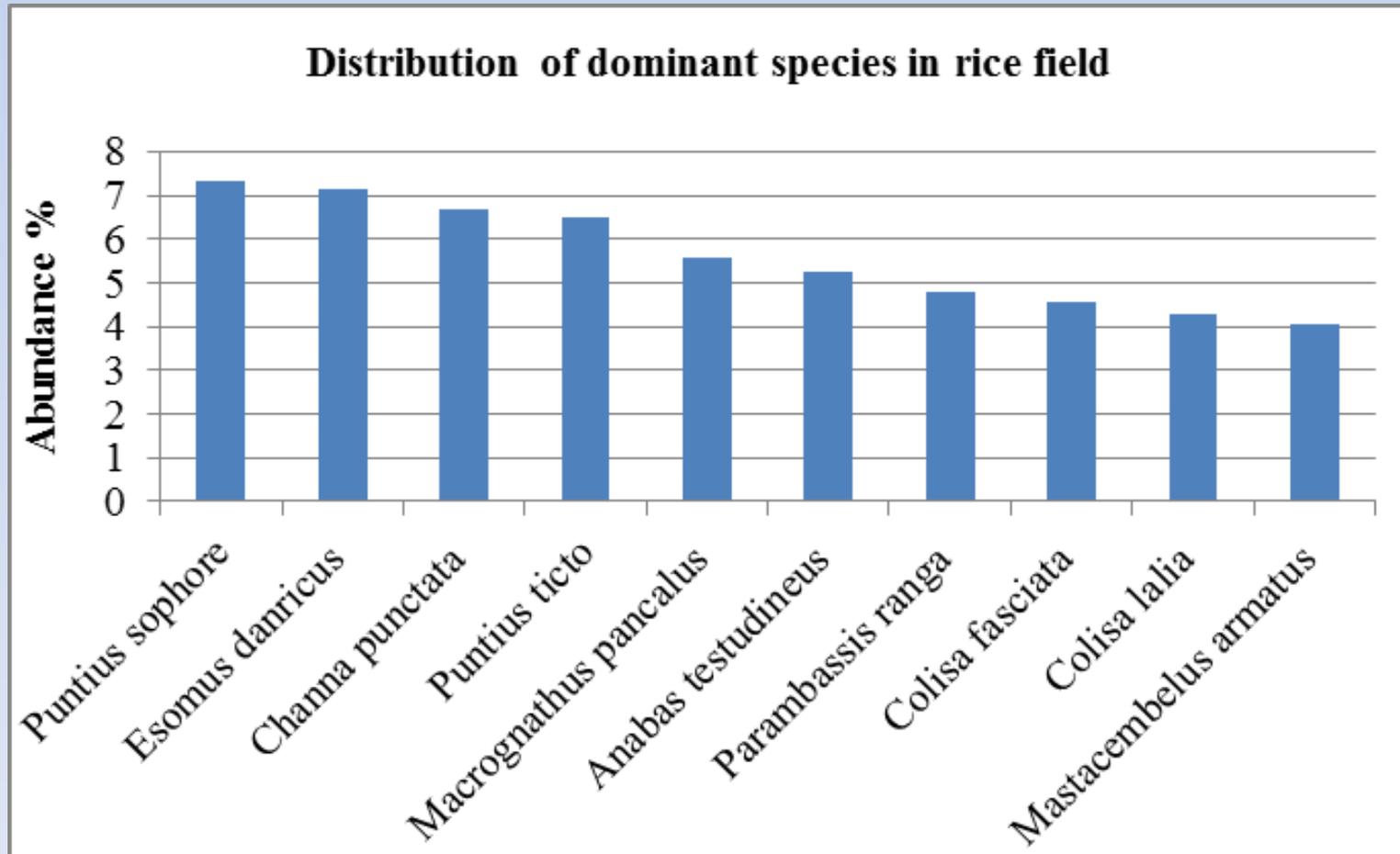


Ring

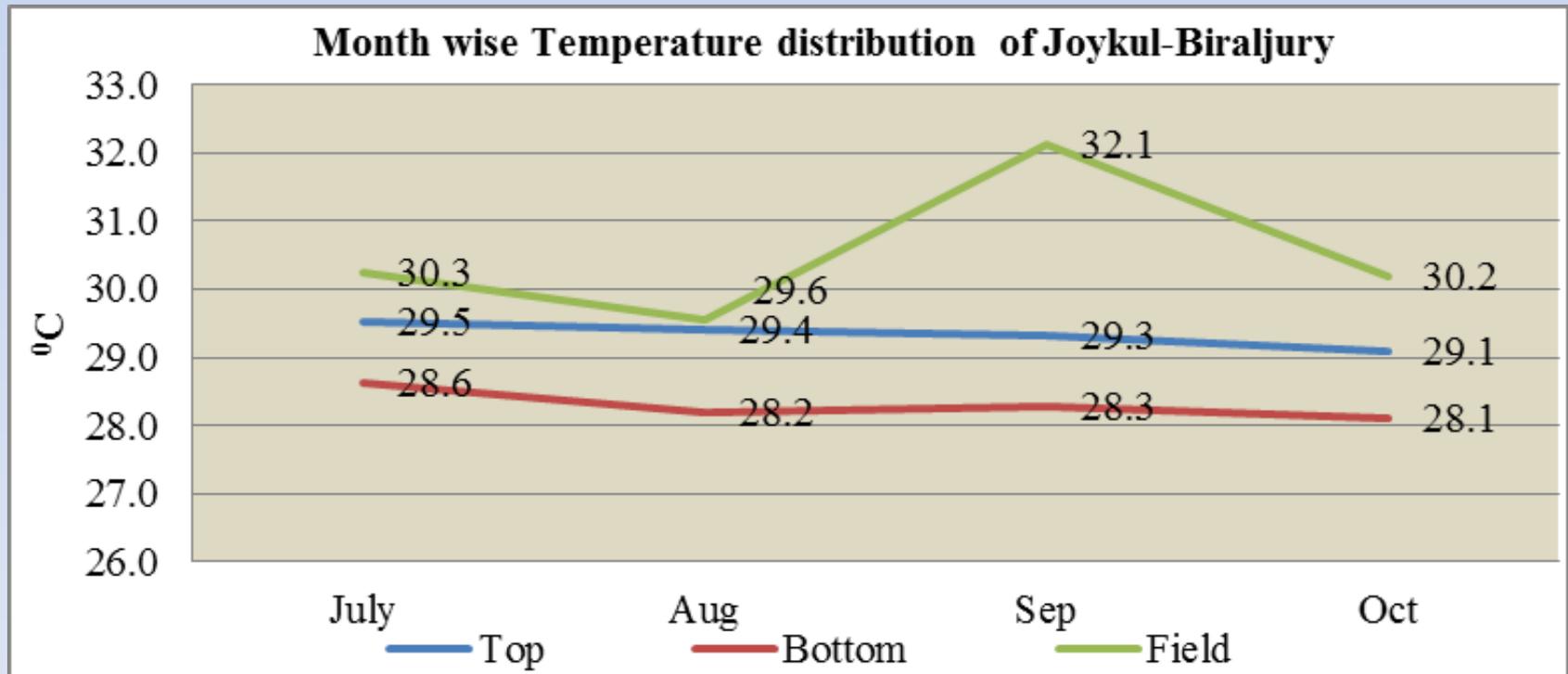


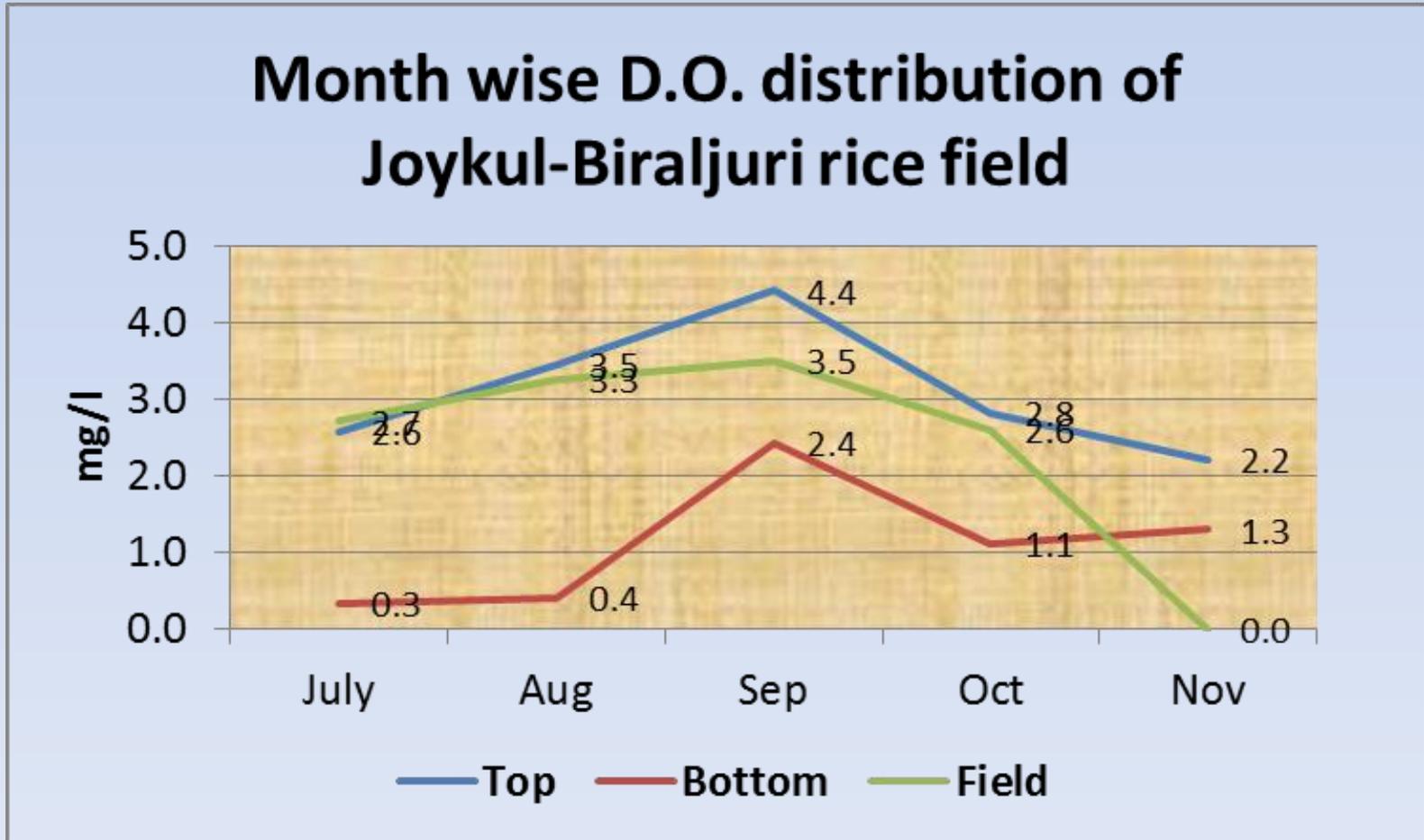
Rice Field

Result Cont.



Result Cont.





Result Summery

- Fish production increased in interventions rice field 49% compared with control fields.
- Fish consumption data revealed that 90% fish captured from ring were consumed.
- Individual farmer was harvested on an average 6.6kg fish from his ring
- It was also reported that foli (*Notopterus notopterus*) was found in one study site after 10 years.
- 10 small indigenous species were contributed more than 57% of the fish production.

How the solution would address the problem?

Rising temperatures and prolonged drought or erratic rainfall which may affect fish survival, destruction of hatchlings, sac-fry, juveniles and fish fingerling.

The recorded data revealed that some fishes found dead on the face of dry or near dry rice field in higher temperatures.

Fish microhabitat offers favorable or better conditions (optimum D.O. water depth and temperature), this may contribute to better production of fish on the face of climatic changes.

How the Implementing Agency Reach Out the Beneficiaries

Directly

Indirectly

- Concern/line GoB department
- Local NGO through partnership
- CBO
- PPP
- Communication product

Final Words

Summarize your presentation in one final sentence.

