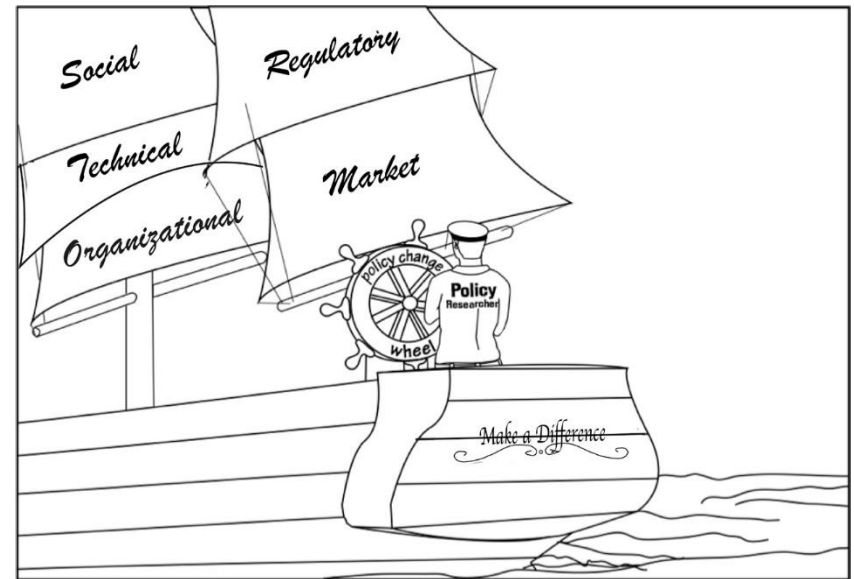
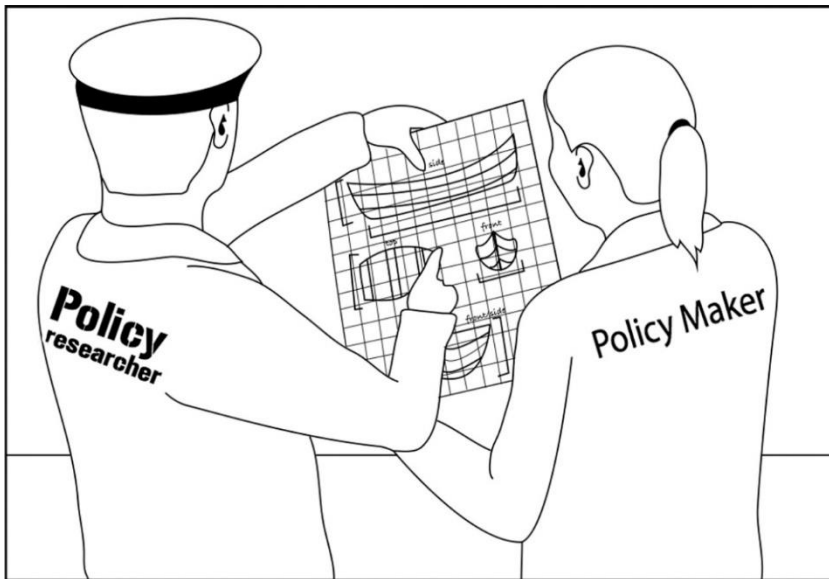


Methodological and Data Analysis Framework for WorldFish Contribution



**Dr. Peerzadi Rumana Hossain
&
Dr. Benoy Kumar Barman**

Policy Research Methods

Policy analysis uses both **qualitative methods** and **quantitative methods**

Quantitative research includes survey, data analysis and model building (which we are not conducting for this research)

A common practice for **Qualitative** is to **define the question and evaluation criteria and indicators**; **identify and evaluate alternatives**; and **recommend a certain policy accordingly**.

We will follow the qualitative method which includes consultation meetings with sectoral experts

Qualitative policy analysis

3 key Phases



- Define the problem or the question;

- Identify and evaluate alternatives;

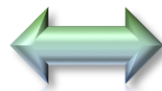
- Recommend a certain policy to solve defined problem or the raised question without negative side effects



Priori assessment - product of careful "back-room" analysis of policies



Posteriori evaluation – product of careful “front-room” analysis of consultation meeting results



Describe existing evidence in line with the problem or the question in a manner that changes minds for acceptable recommendations

WF projects' outcomes can act as existing evidence to recommend a certain policy

Best agenda



Phase 1: *Priori* assessment - product of careful "back-room" analysis of NFP 1998

- To define the problem/questions/Issues



- **No nutrition relevant objective or clause within the 1998 policy;** Health is mentioned in the objective to improve public health, however, within the policy it is stated within transportation and marketing of fish section to abide by the approved government regulations for human health and fish quality control and to provide encouragement and support to the private fisheries sector for health services. So **Nutrition and Public health relevant policy input is required for aquatic foods in NFP 1998 revision.**
- **Climate resilience or climate adaptation or environmental sustainability is entirely absent within the 1998 policy.** Environment is there for water pollution relevant matters, exotic species, rice-shrimp production, semi-intensive shrimp farming, and biodiversity in marine environment, environment friendly fish and shrimp culture technologies, co-ordination among different govt. departments. **This also reveals the urgency for inclusion of relevant clauses in line with climate resilience or adaptation or environmental sustainability for aquatic food systems in NFP 1998 revision.**
- **Regarding the socio-economic inclusion, two objectives** were focused on poverty alleviation through improvement of socio-economic conditions of the fishers and achieving economic growth by exporting fish and fisheries products. Besides, **gender and youth have been stated in terms of only encouragement, prioritize, training and unemployment. Food loss, waste, availability, accessibility and affordability relevant directions are entirely missing.**

Phase 1: *Priori* assessment - product of careful "back-room" analysis of existing policy documents - To define the problem/questions/Issues *Contd.*

To review

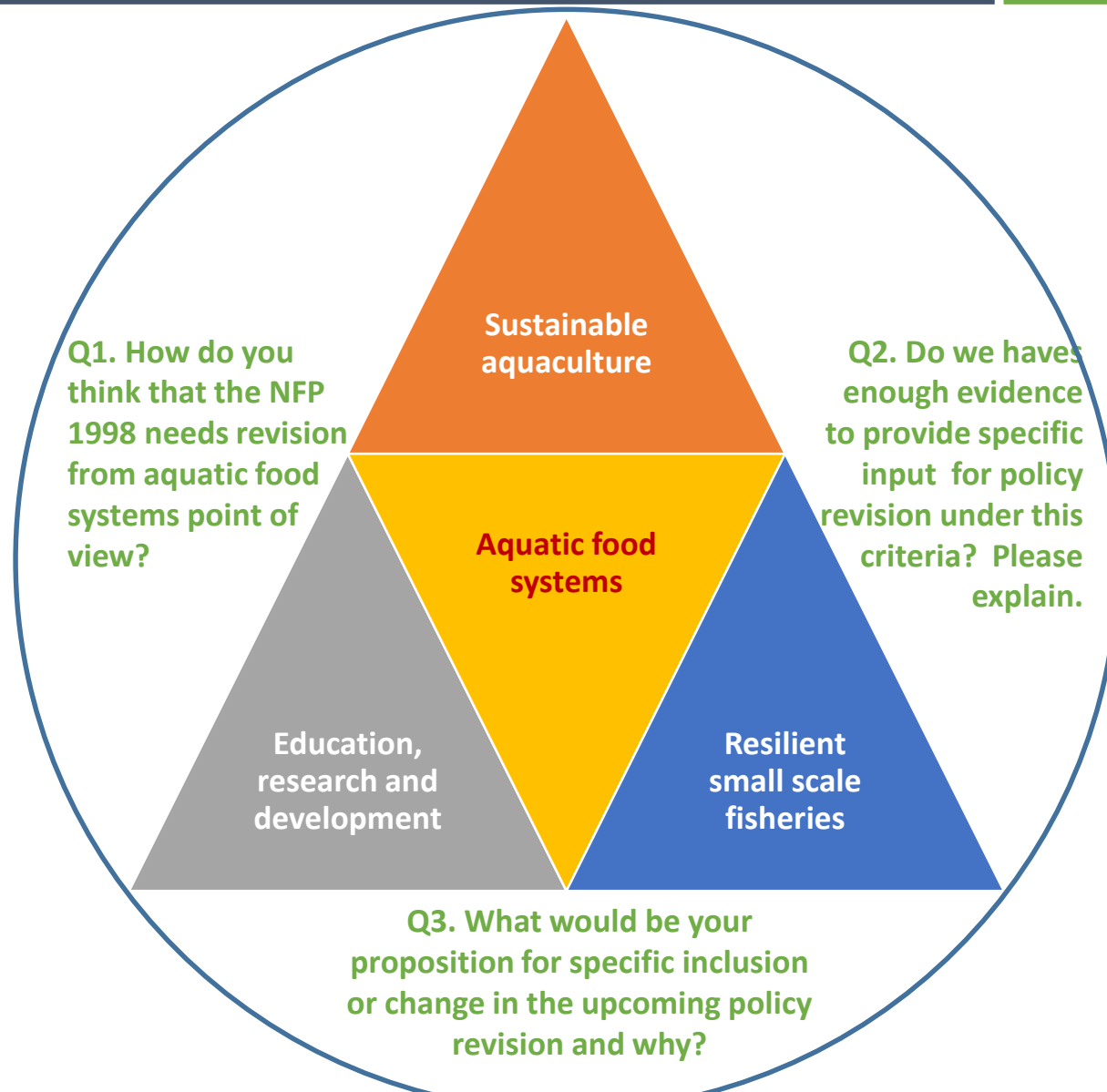
- Eight strategies relating to fisheries and aquaculture of Bangladesh
- 8th Five year plan of Bangladesh: July 2021 to June 2025 – Promoting Prosperity and Fostering Inclusiveness
- Perspective plan of Bangladesh 2021-2041
- FAO and WF-SUCHONA programme paper/document on Nutrition sensitiveness of the policies
- Bangladesh delta plan 2100
- Document of the detail review of Chattam house - Policy and public expenditure opportunities to support implementation of BMGF livestock and aquaculture strategy_ Bangladesh case study
- WorldFish research project documents

Evaluation criteria, indicators and objectives

Criteria/Theme	Indicators	Objective
1. Aquatic food systems	<ul style="list-style-type: none"> 1.1 Sustainable aquaculture 1.2 Resilient small scale fisheries 1.3 Education, Research and Development 	To enable sustainable aquatic food production and ensure resilient aquatic food systems
2. Social and Economic Inclusion	<ul style="list-style-type: none"> 2.1 Gender equality, youth and social inclusion 2.2 Digital transformation 2.3 Market system approach 2.4 Private sector engagement/Business model development 2.5 Extension, dissemination and capacity building 	To transit from research to impact based on the lessons learned and new ideas for sustainable livelihoods, decent work and well being with an inclusive people centered blue economy
3. Nutrition and Public Health	<ul style="list-style-type: none"> 3.1 Fish for Nutrition 3.2 Diversified, Safe and healthy aquatic foods for human consumption 3.3 Prioritize nutrition and health for vulnerable and marginalized people 3.4 Nutritional Governance 	To advance and increase scientific knowledge and public awareness and understanding of the nutrition, safety and health benefits of aquatic foods
4. Climate Resilience and Environmental Sustainability	<ul style="list-style-type: none"> 4.1 Climate adaptation 4.2 Environmental health and biodiversity conservation 4.3 Enhanced climate resilience and reduced green house gas emissions 	To discover, develop, test, adapt and promote science-based innovations, technologies and practices that reduce climate risk through sustainable use and management of aquatic resources

For both Aquaculture and Fisheries

Consultation meetings in line with aquatic food systems for NFP 1998 revision



- 1 NO POVERTY

- 2 ZERO HUNGER

- 4 QUALITY EDUCATION

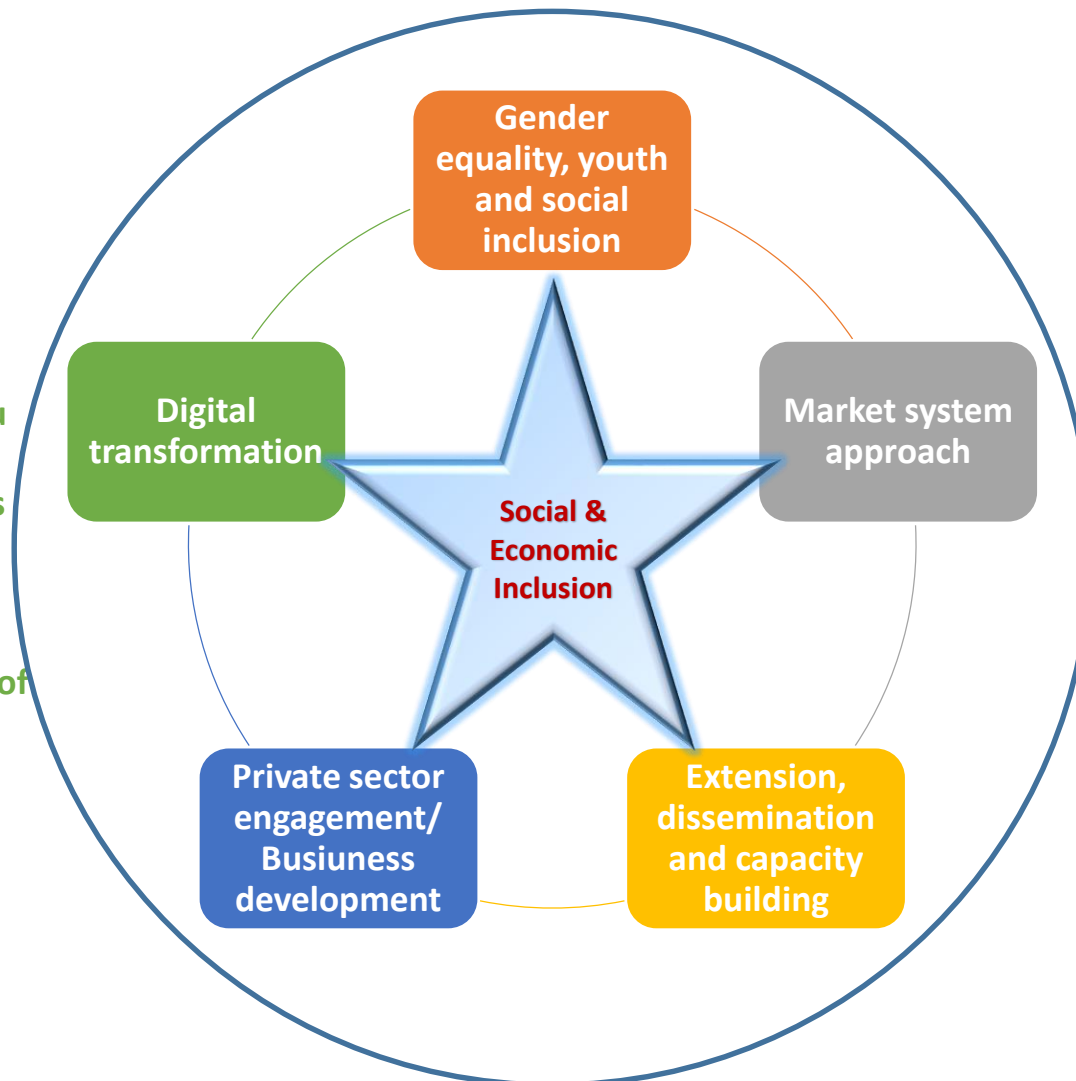
- 8 DECENT WORK AND ECONOMIC GROWTH

- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION

- 14 LIFE BELOW WATER


Consultation meetings in line with Social and Economic inclusion for NFP 1998 revision



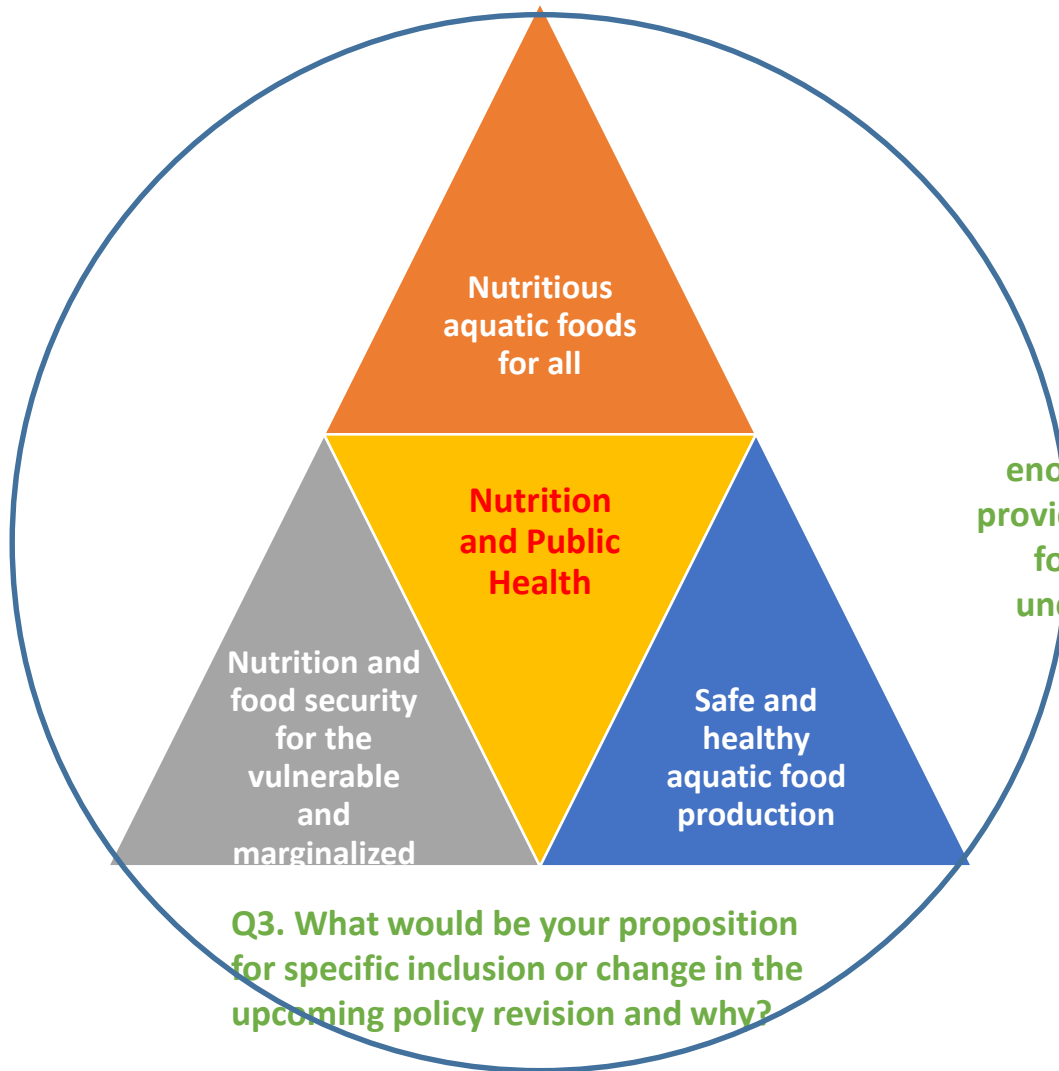
Q1. How do you think that the NFP 1998 needs revision from Social and Economic Inclusion point of view?

Q2. Do we have enough evidence to provide specific input for policy revision under this criteria? Please explain.

Q3. What would be your proposition for specific inclusion or change in the upcoming policy revision and why?

- 1 NO POVERTY
- 2 ZERO HUNGER
- 5 GENDER EQUALITY
- 8 DECENT WORK AND ECONOMIC GROWTH
- 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
- 10 REDUCED INEQUALITIES
- 17 PARTNERSHIPS FOR THE GOALS

Consultation meetings in line with Nutrition and Public Health for NFP 1998 revision



Q1. How do you think that the NFP 1998 needs revision from Nutrition and Public health point of view?

Q2. Do we have enough evidence to provide specific input for policy revision under this criteria? Please explain.

Q3. What would be your proposition for specific inclusion or change in the upcoming policy revision and why?



1 NO POVERTY



2 ZERO HUNGER



3 GOOD HEALTH AND WELL-BEING



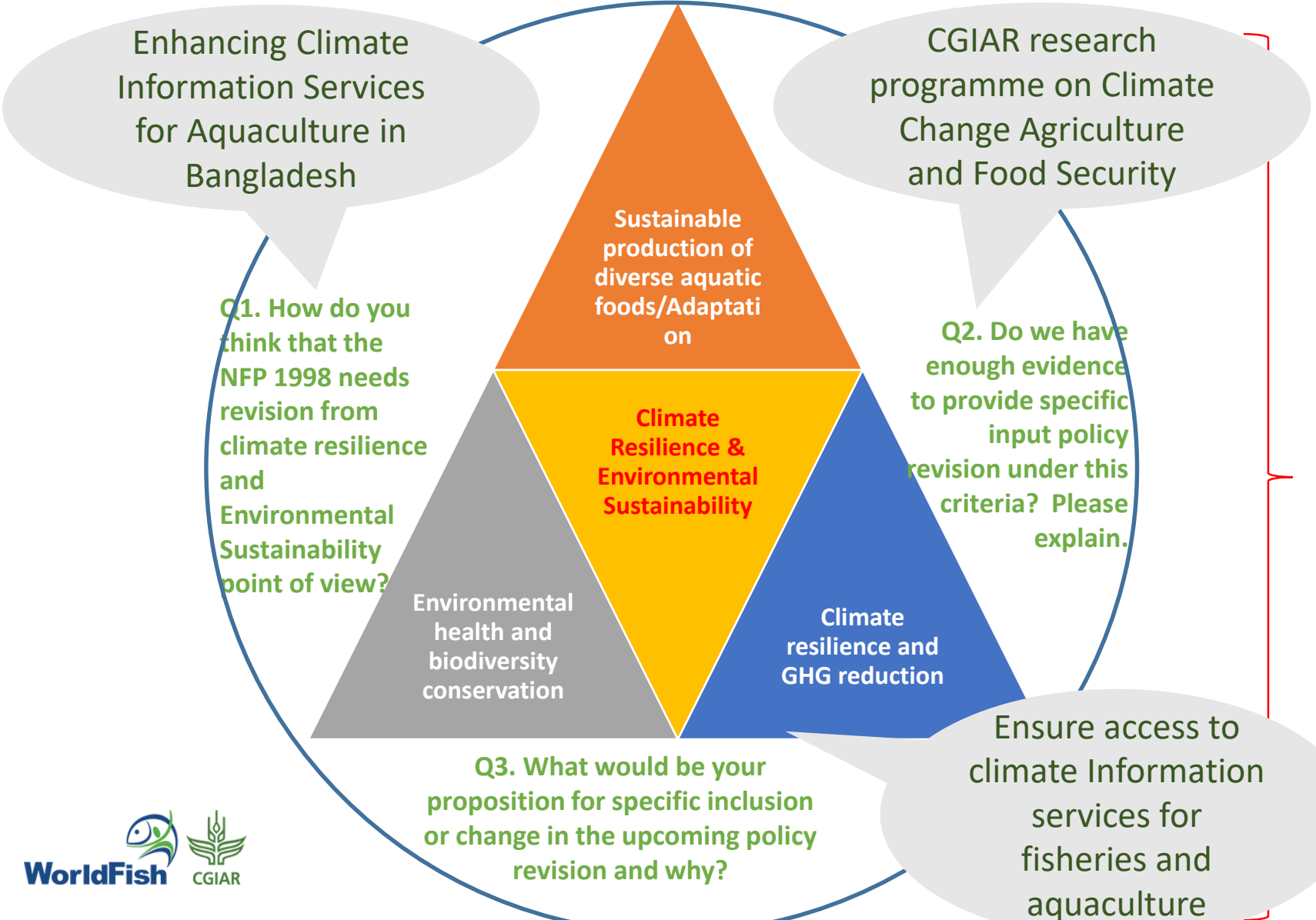
12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Envision 2030



Consultation meetings in line with Climate Resilience and Environmental Sustainability for NFP 1998 revision



Phase 2: Posteriori evaluation – product of careful “front-room” analysis of consultation meeting results

- To identify and evaluate policy recommendations

Data Analysis Framework



From the stakeholder consultation workshops in Rajshahi and Rangpur

Interventions

Climate Resilience and Environmental Sustainability

Climate adaptation

Environmental health and Biodiversity Conservation

Climate resilience and GHG reduction

1. To identify fish species which are viable to transforming environment
2. Salt tolerate fish species introduce
3. Region wise project
4. Ensure EIA for establishing every industry
5. Climate resilient fish species introduce
6. Enhancing climate information R & D
7. Bio flock Technology
8. Fingerling production in rice field
9. Water holding capacity technology
10. Cropping diversity
11. Re-excavation of water bodies
12. Greenhouse model for winter season
13. Climate smart technology innovation and dissemination
14. High temperature and cold resistant species brood production
15. Short culture period species selection for aquaculture
16. Climate smart information services
17. Aqua-zonation based on climatic sub-regions
18. Climate species aquaculture technology development and mass awareness <Flood prone, drought prone
19. Short duration(3/4) months cultivable variety development
20. Fisheries/Aquatic zoning for sustainable development
21. Fisheries genetic resource conservation
22. Fisheries breeding period rehabilitation
23. Source of pollution identification
24. Water treatment plant established
25. Periodic excavation/re-excavation of silted wetlands
26. Local indigenous fish species cultivation with the G3 Rohu or other carp species

Step 1 – What?

From the stakeholder consultation workshops in Rajshahi and Rangpur

Interventions

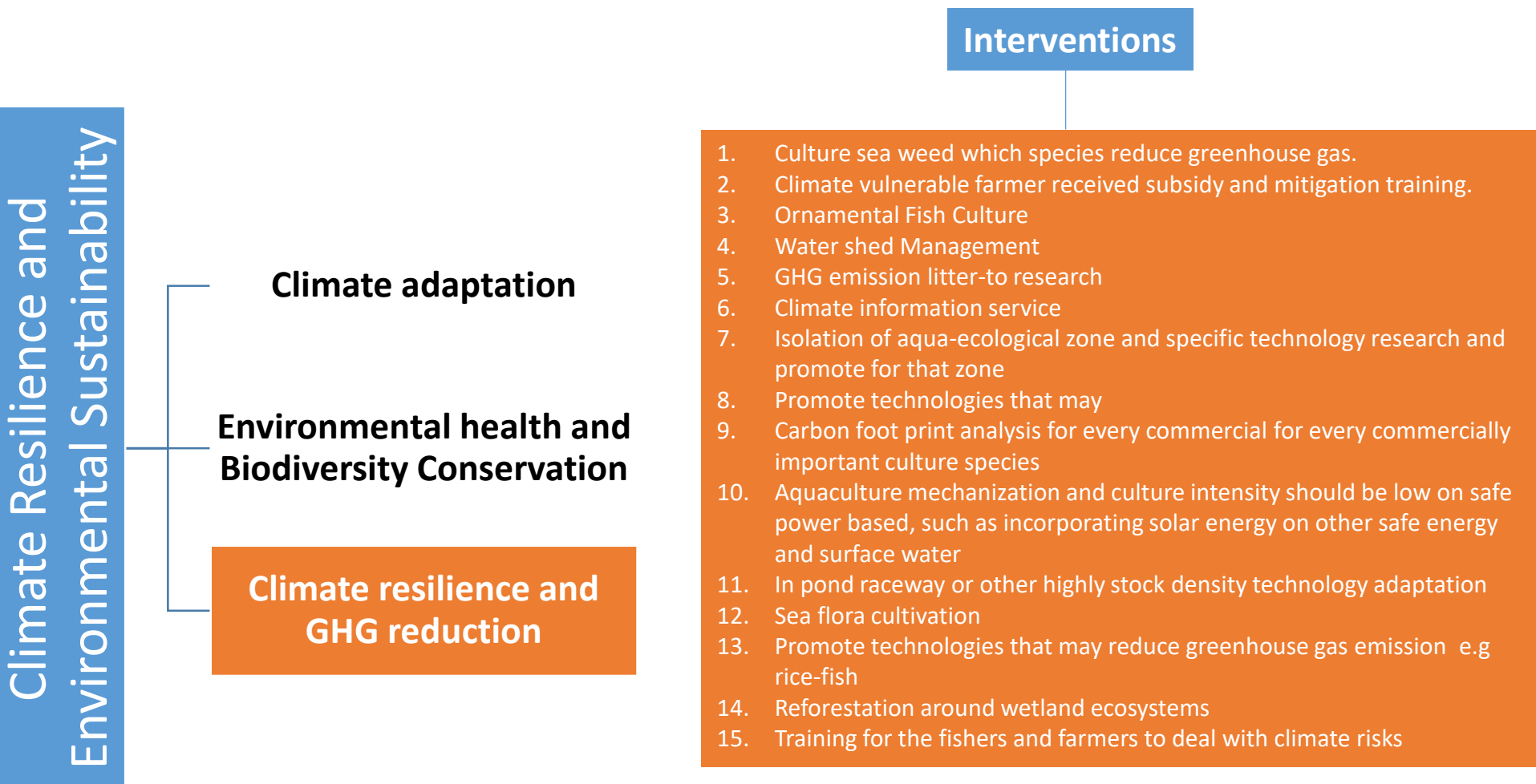
Climate Resilience and Environmental Sustainability

Climate adaptation

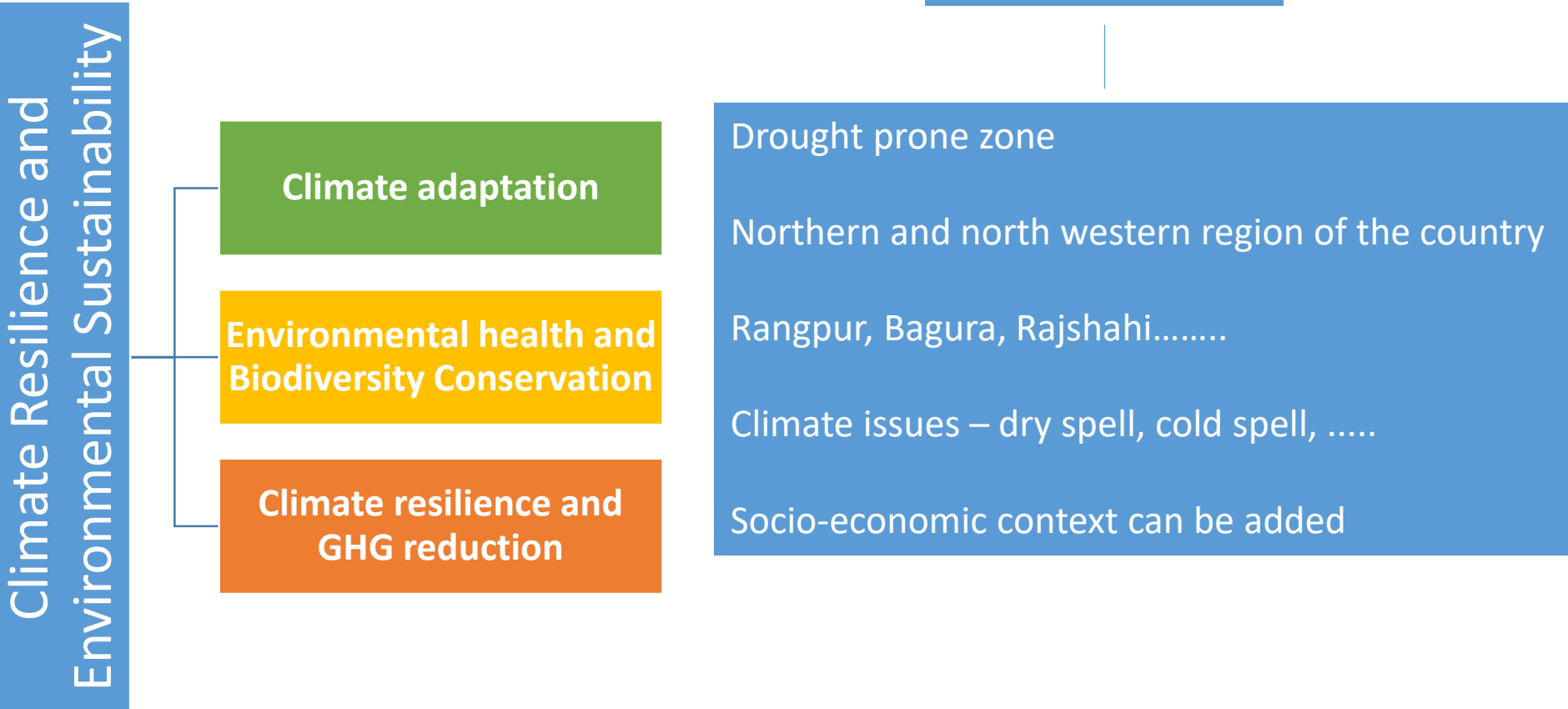
Environmental health and Biodiversity Conservation

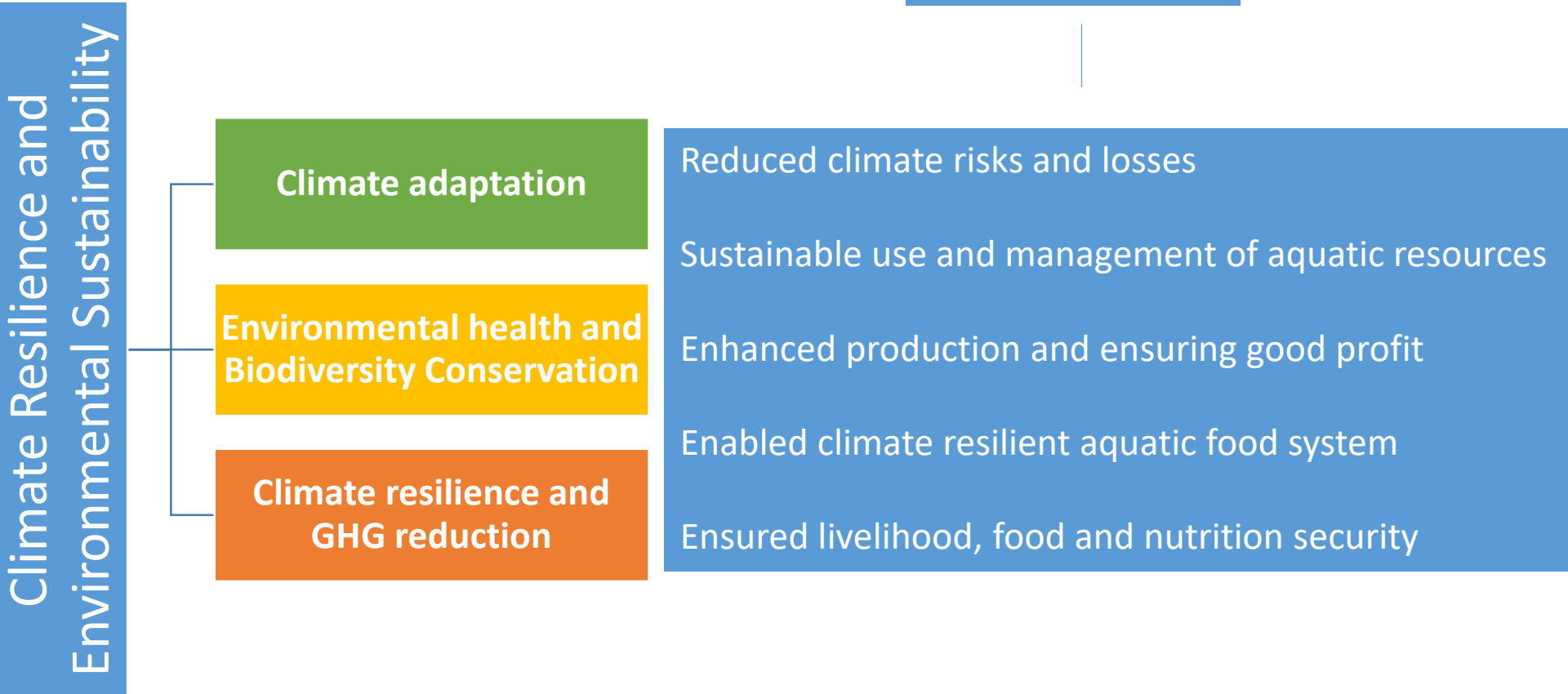
Climate resilience and GHG reduction

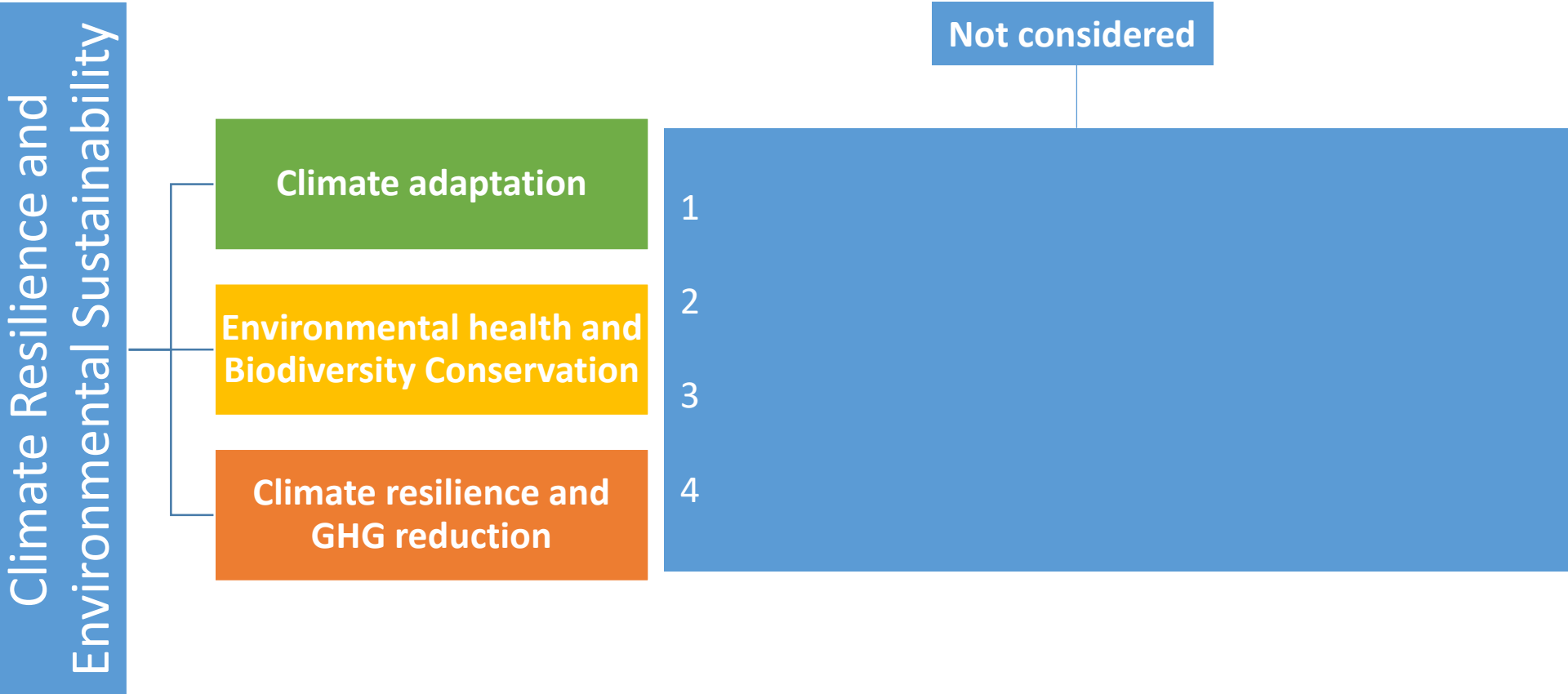
1. Ensure fish natural breeding, nursery and habitat
2. Waterbody safe from industrial pollution
3. Fish sanctuary established
4. Conservation genepool more R &D
5. Encourage to culture SIS
6. Law enforcement for industrial effluent.
7. SIS Culture and Conservation
8. Brood Bank
9. Orchid net to reduce temperatures during high temperatures
10. Farm mechanization
11. Venami Chingri for Northern Region
12. Restriction of import of new fish species to save indigenous fish species biodiversity
13. Open water aquaculture/fingerling stocking program
14. No fishing zone identification
15. Residual management of commercial operation/Need technological innovation
16. Plastic free open water system-blockage the drainage system for plastic prevention
17. Use of bio pesticide in crop land
18. Fish meal must be free from heavy metal contamination
19. To conserve biodiversity specific water body based management thought be developed
20. Identifying different resource on the basis of endangered species and reduce management
21. Public awareness against monofilament gill net
22. Stocking enhance for endangered fish species
23. Fish feed must be free from heavy metal contamination
24. Fish genetic resource conservation through cryopreservation
25. Increased public awareness against pollution
26. Optimum range of pesticides/herbicides would be maintained
27. Ensuring use of bio-pesticides in pond farming
28. Use of solar for irrigation and aeration

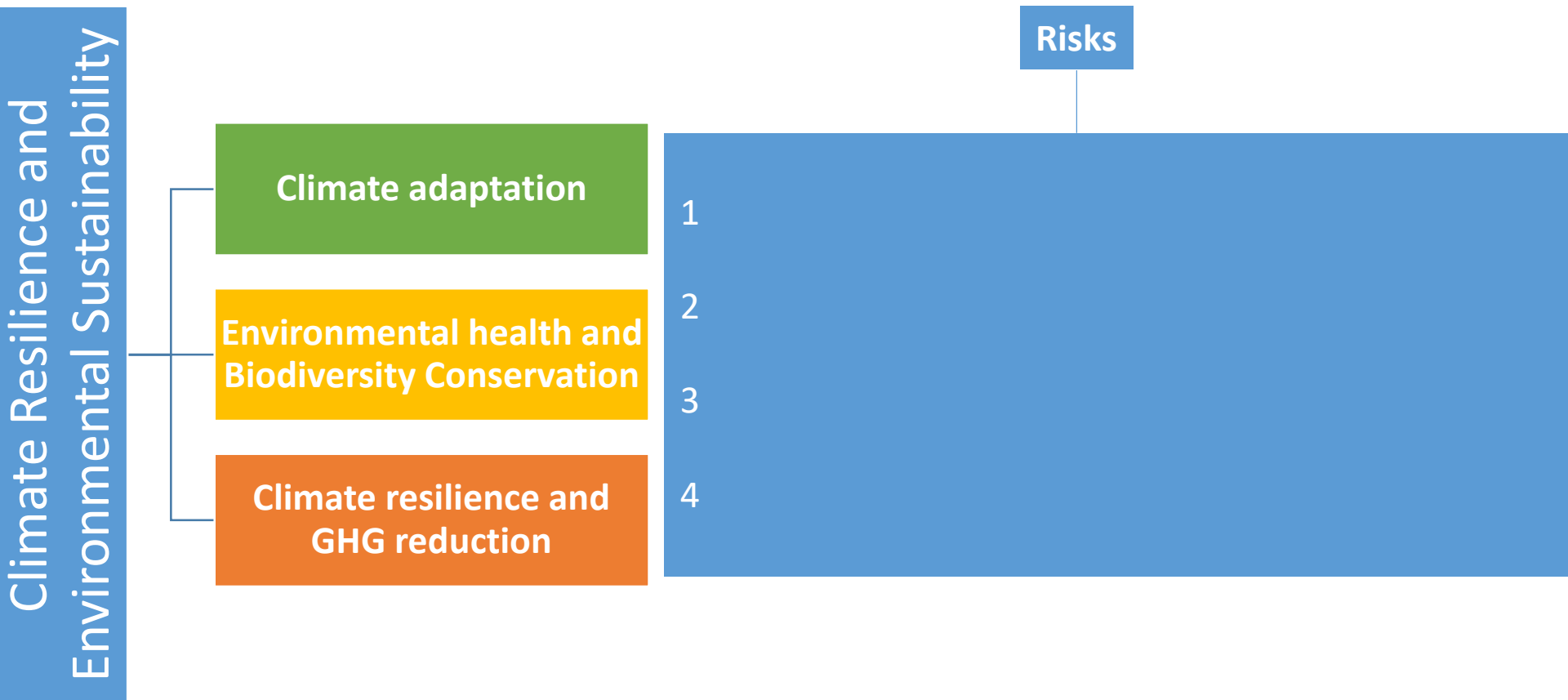


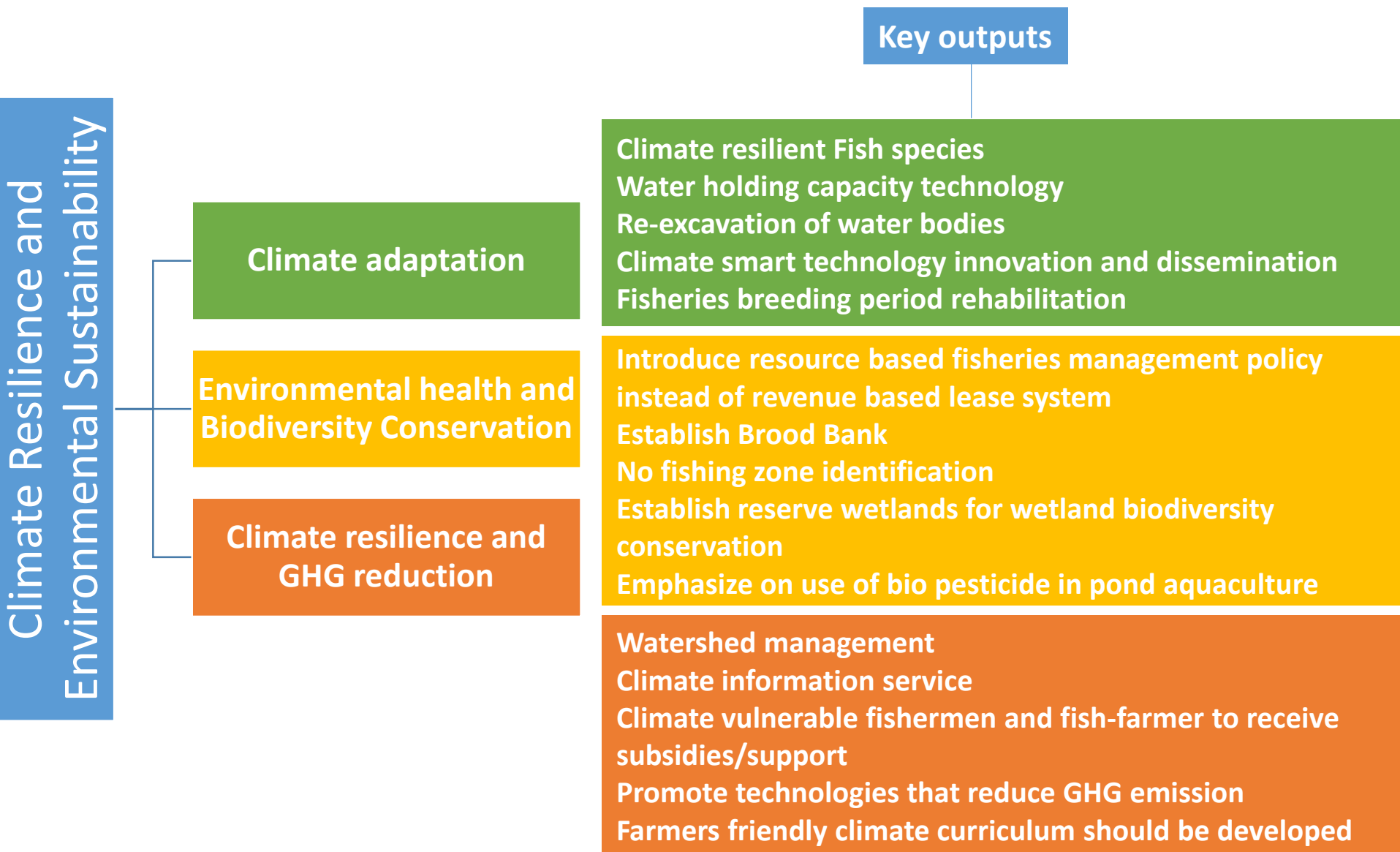
From the stakeholder consultation workshops in Rajshahi and Rangpur

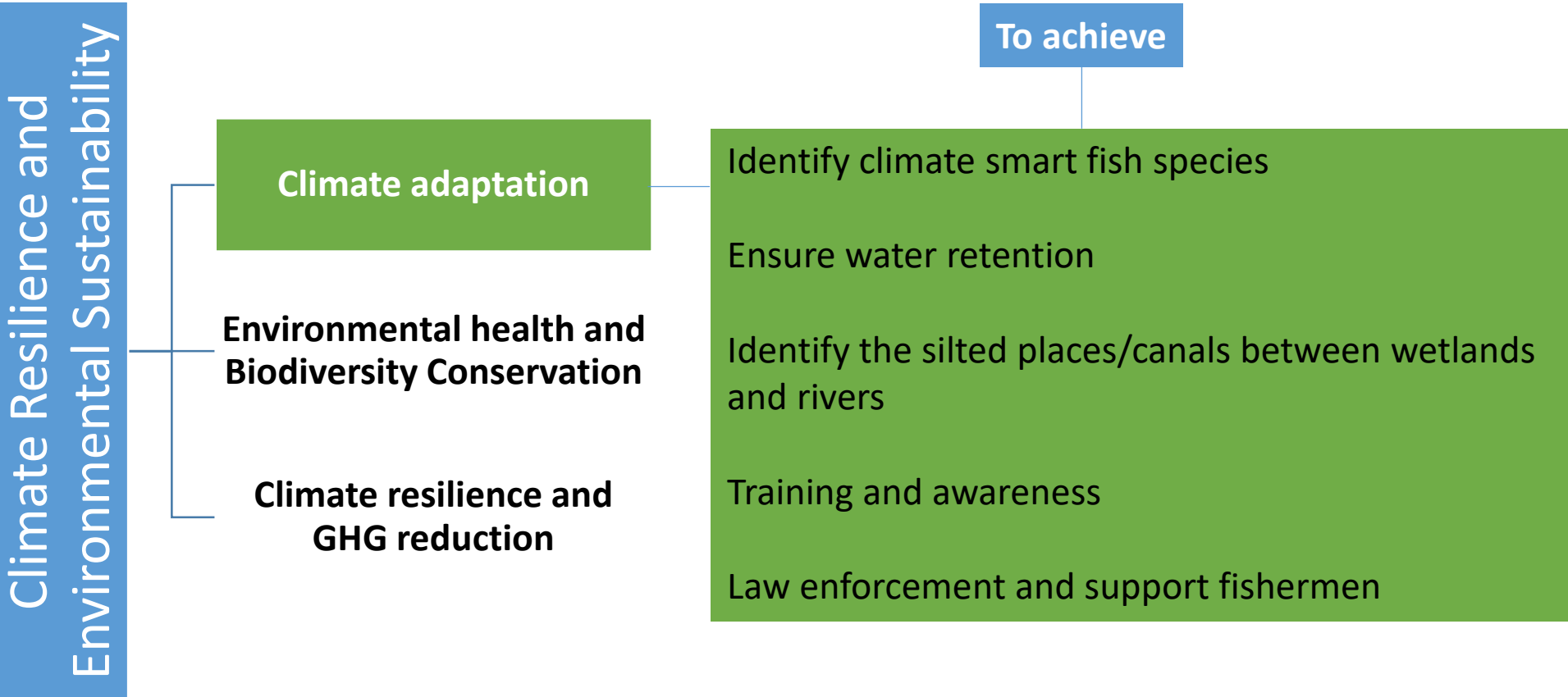












Climate Resilience and Environmental Sustainability

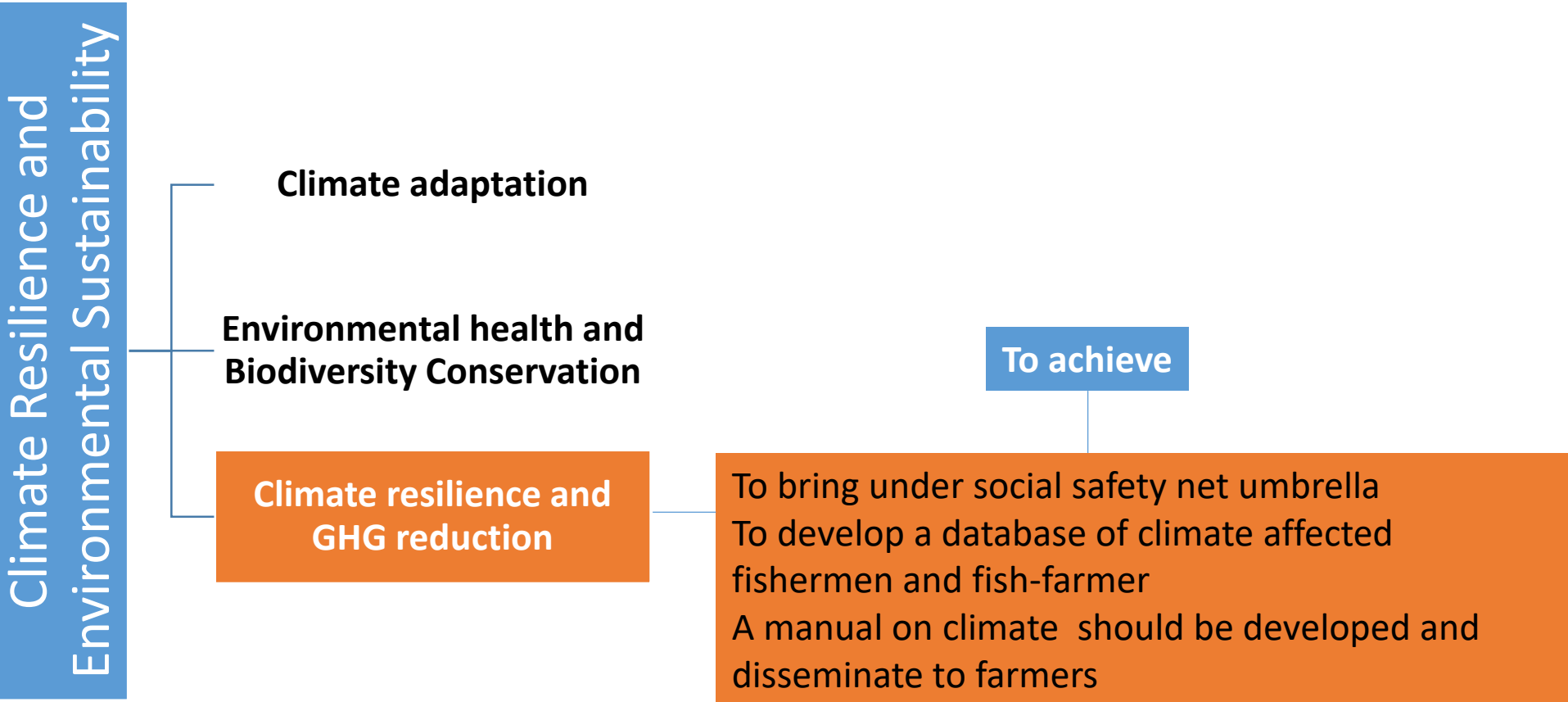
Climate adaptation

Environmental health and Biodiversity Conservation

Climate resilience and GHG reduction

To achieve

Present lease system needs modification
To declare selected natural waterbodies as brood bank
To establish brood bank in selected govt. fish farms
Identify the hotspots for different fish species
Declare and maintain the reserve wetlands
Grow public awareness through training for increasing use of bio pesticides in pond aquaculture
Optimum usage of chemical pesticide/herbicides in aquaculture and agriculture
Water treatment plant should be developed



Phase 3: To recommend a certain policy

1. Coding/Grading

- The policy research team will send the key outputs to the meeting participants for coding the propositions as good (+), very good (++) and Excellent (+++) based on the reason and evidence for a particular proposition

2. Verification

- The graded/coded propositions will be verified with the selected Criteria/Theme, Indicators and Objectives and will be annotated as √ (if the proposition matches with the TIO) or X (if the proposition does not match with the TIO)

3. Developing key propositions

- Listing out key propositions based on the grading and verifications

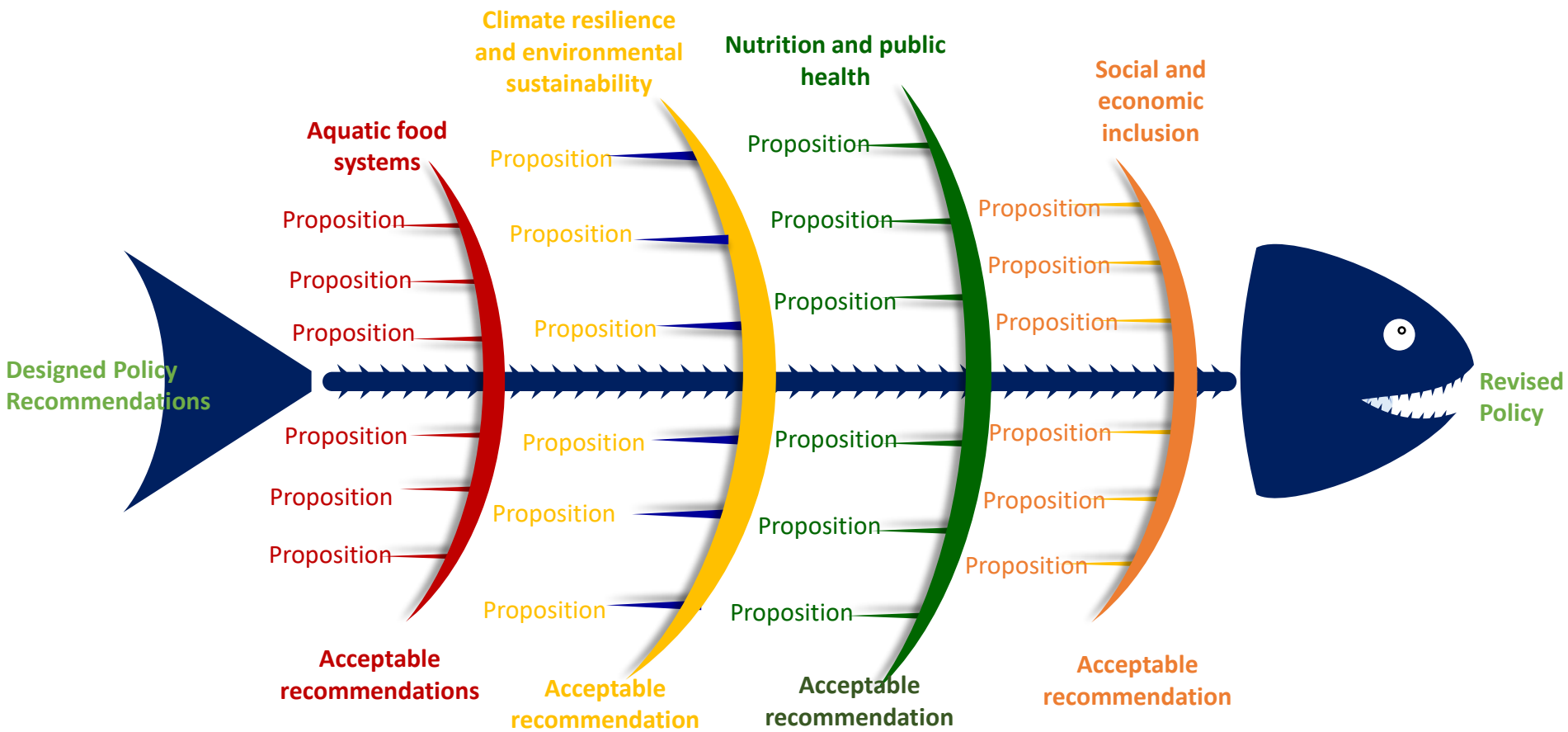
4. Design Policy recommendation

- The research design team will then share the policy recommendations with the county team, where the country team will provide their feedback for any final changes

5. Report & evaluation

- In the final step, the research design team will produce a summary report on WorldFish Research on BFP 1998 revision. This will be shared with the Regional Director-SA for review prior to finalization.

Systematic analysis of the propositions in line with evidence to design recommendation



LONG TERM IMPACT PATHWAY

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION	13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT GOALS