



INITIATIVE ON
NEXUS Gains



ICID-CIID

**International Workshop on
“The water-energy-food-ecosystems nexus: trade-offs and foresight analysis for policy and investment decisions”**

**75th IEC Meeting and 9th Asian Regional Conference
1 – 7th Sep 2024
Sydney**

| Time | Presentation | Speaker |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| 1300-1630 | | |
| 13:00 – 13:05 | Opening Remarks by Chairs: Dr Ragab Ragab | |
| 13:05 – 13:15 | Welcome and Overview of One CGIAR initiative Nexus Gains results and outcomes | Dr Alok Sikka and Dr Mohsin Hafeez (IWMI) |
| 13:15 – 13:30 | Presentation from ICID WG- WEF Nexus | Dr Yella Reddy, ICID |
| 13:30 – 13:45 | Trade-offs and foresight analyses of WEF interventions in the Indus basin | Dr Mohsin Hafeez (IWMI) |
| 13:45 – 14:00 | Trade-offs and foresight analyses of WEF interventions in the Ganges basin | Dr Sena and Alok (IWMI) |
| 14:00 – 14:15 | Water productivity for resilience: pathways to maximise WEF synergies | Dr Alok Sikka (IWMI) |
| 14:15 – 14:30 | Integrated storage management from WEF nexus lens | Faiz Alam (IWMI) |
| 14:30 – 15:00 | Tea break/Health break | |
| 15:00 – 15:15 | Harnessing Solar energy for Sustainable Water, Energy, Food, and Environmental Nexus (WEF) | Dr Santosh Mali (ICAR) |
| 15:15 -16:15 | Panel discussion: Dr Narges Zohrabi | |
| | <ol style="list-style-type: none"> 1. Paul Pavelic, Senior Researcher, IWMI 2. Prof Sylvester Mpandeli, Vice President, ICID 3. Sanjeeb Baral, Director general of Department of irrigation and water resources, Nepal | |
| 16:15 – 16:30 | Closing remarks (Co-chairs) | |

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CGIAR's Initiative on Water-Energy-Food- Environment (WEFE) Nexus

Dr. Mohsin Hafeez

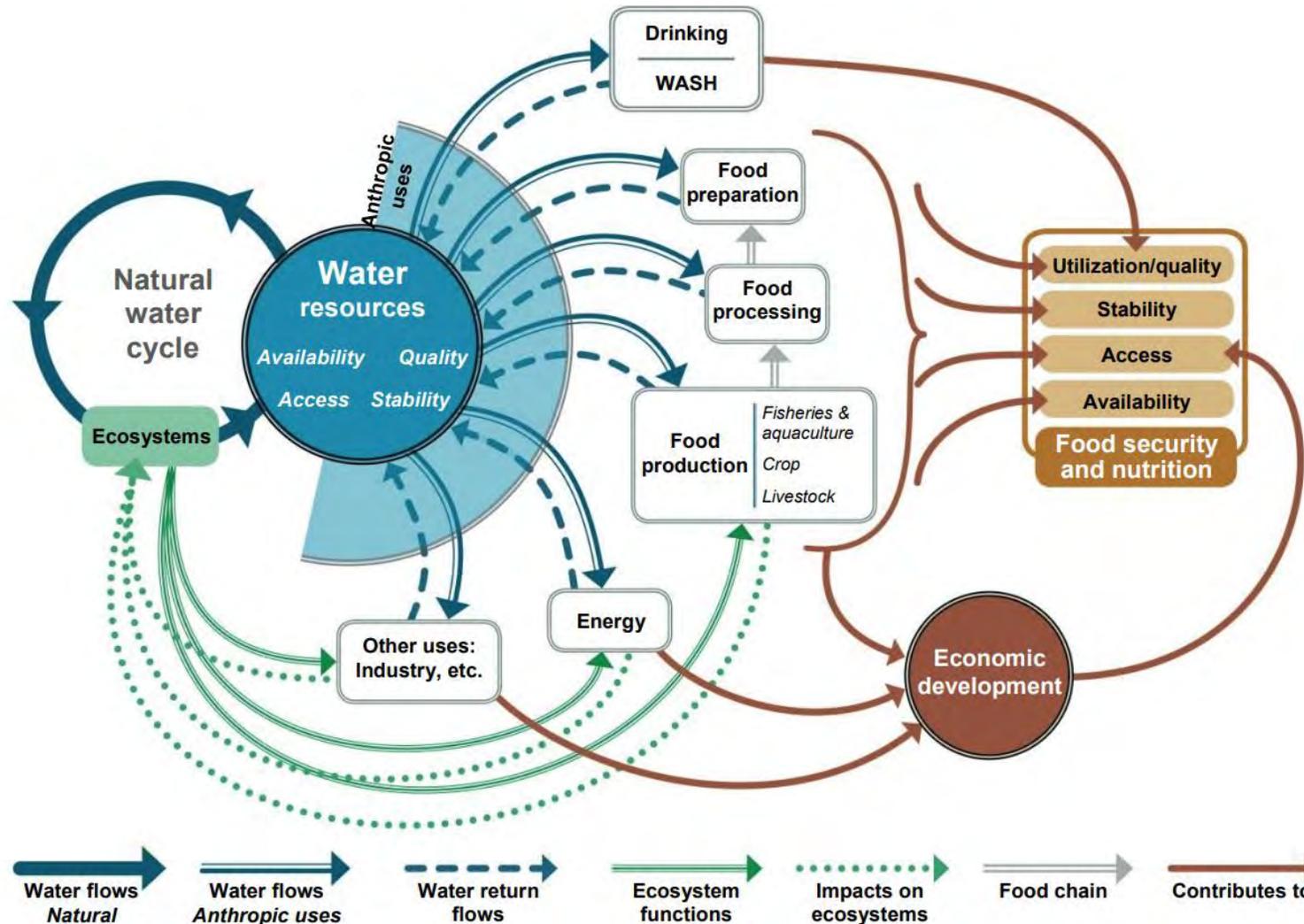
**IWMI Director, Water, Food and Ecosystems
IWMI Country Representative – Pakistan**



Multiple interfaces between water and food security and nutrition



NEXUS Gains:
Realizing Multiple Benefits
Across Water, Energy, Food
and Ecosystems



Water is essential for food and nutrition security

Water is a system connector for ecosystem, food, energy and economic activities

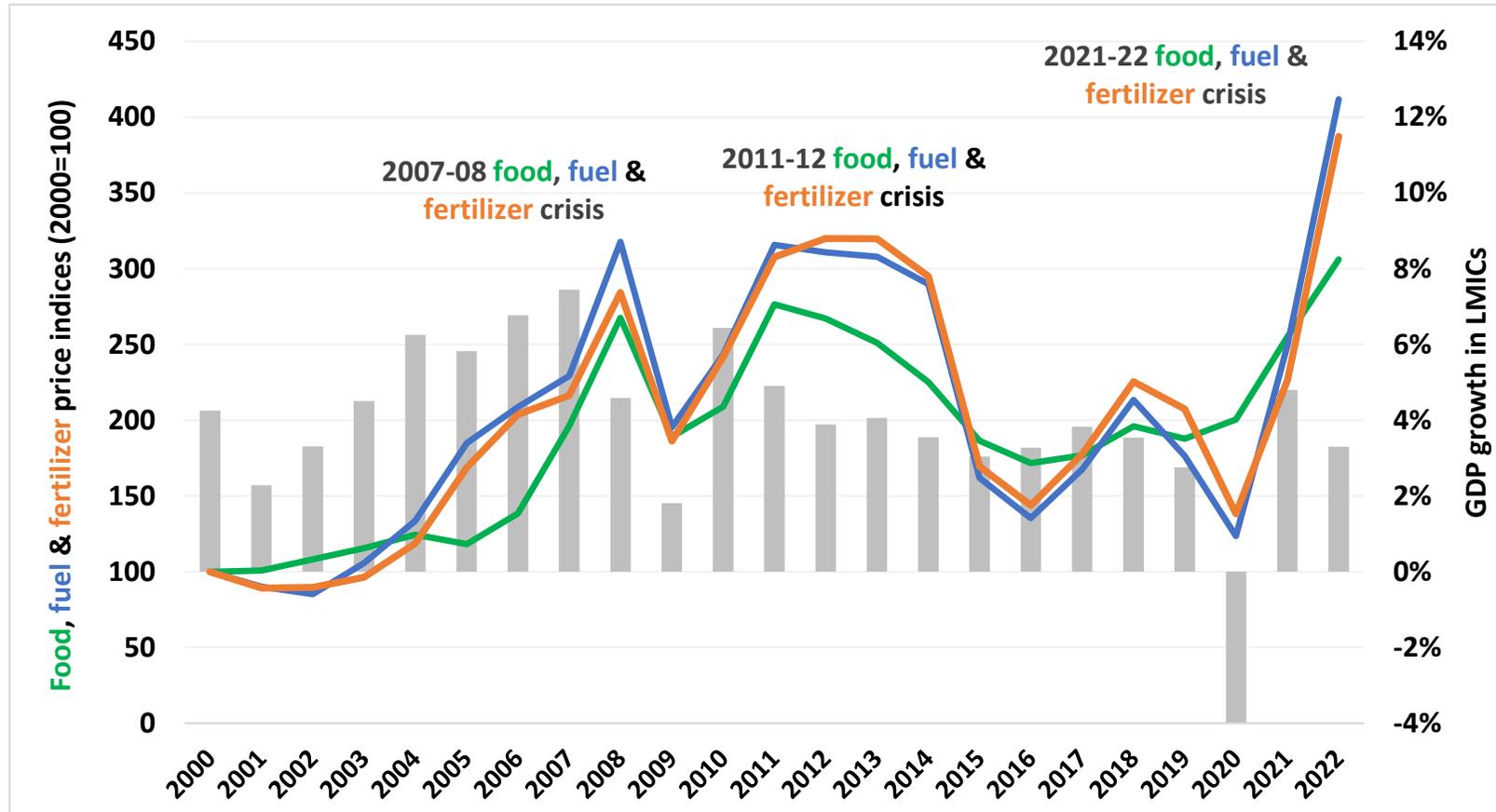
70 percent of freshwater withdrawals for agriculture

Water could be potential for conflict in transboundary river basins

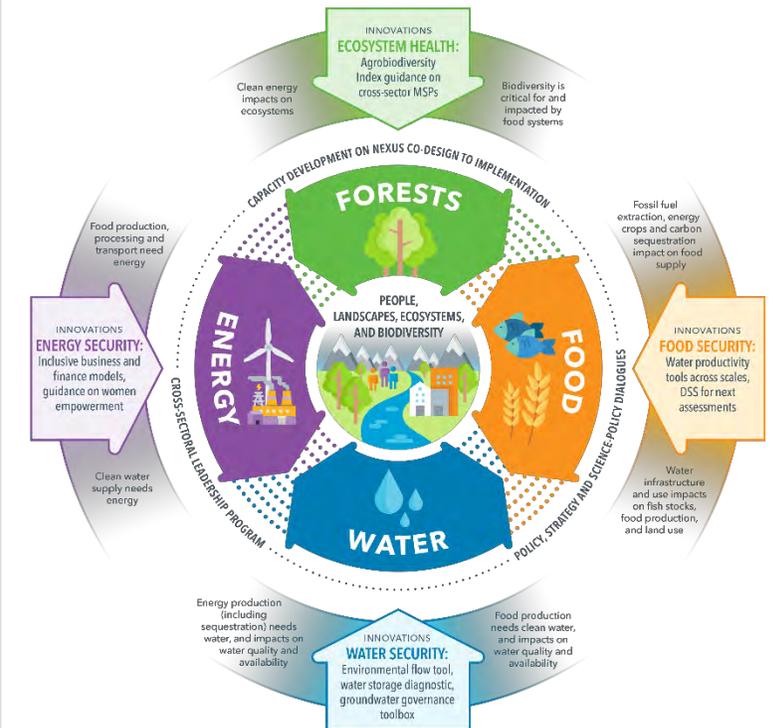
Water–Energy–Food–Environment (WEFE) nexus challenges in a climate crisis



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Source: [Headey and Hirvonen \(2022\)](#) using data from FAO, the World Bank and the IMF



NEXUS Gains Workstreams



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- 1. Co-developing and scaling NEXUS innovations** using foresight methodologies and trade-off analyses
- 2. Boosting water productivity across scales** (farm to watershed to basin) **and sectors** using a whole systems lens
- 3. Energizing food and water systems** sustainably and inclusively
- 4. Strengthening cross-sectoral, multi-stakeholder governance** at community, national and regional levels
- 5. Developing Capacity for WEF E Actors**, Including Emerging Women Leaders

CGIAR's WEFE NEXUS Gains Geographies: a basin approach



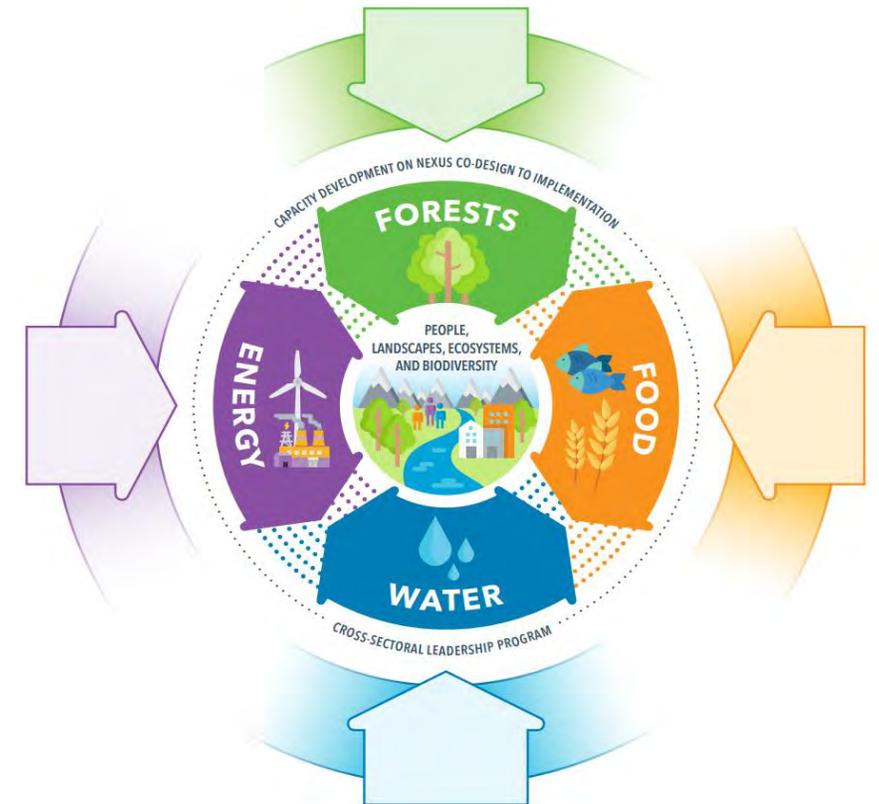
Basin approach:

- Quantification and accounting of WEFE resources
- Upstream-downstream inter-dependencies
- Synergies, trade-offs and shared benefits across countries



Thank you for your attention!

Dr Mohsin Hafeez
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