Policy Analysis Framework and Application

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Outline of webinar

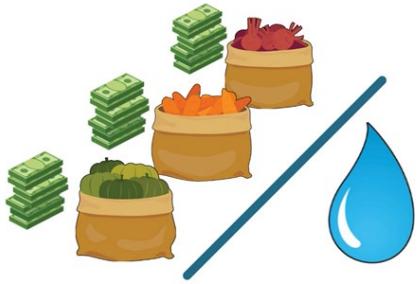
Water Productivity and different perspectives

Water Productivity in policy-making

Policy analysis framework

Application of the framework for Egypt

Mentimeter exercise (discussion)



Water Productivity
'one concept, different perspectives'

WaterPIP
Water Productivity Improvement in Practice

- Biophysical Water Productivity: 'more crop per drop'

$$CWP = \frac{agricultural\ benefits\ (kg\ biomass\ or\ yield)}{\text{water use}\ (m^3\ ET)}$$

- Other Perspectives: socio-economic considerations

$$WP = \frac{socio-economic\ benefits}{\text{water use}\ (m^3\ ET)}$$

Benefits as:

- Economic gains
- Food security
- Food self-sufficiency
- Equity – Employment
- Environmental Sustainability

Water Productivity and Policy

Pro-poor water productivity concept-Ingahuasi project, Peru:

INDICATOR	ASPARAGUS IN THE COAST	SUBSISTENCE IN THE HIGHLANDS
Net income for investor/land owner per hectare (US$/ha)	8,900	470
Net income for investor/land per cubic meter of water (US$/1,000m3)	935	180
Net income for poor workers or smallholders per cubic meter of water (US$/1,000m3)	75	180

See: Socio-economic Water Productivity webinar (series 1)

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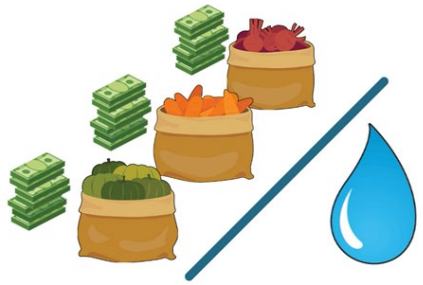
Policy Analysis Framework

Phase	Step		Considerations for the analyst
Prepare	1	Determine scope of policy review	Focus: national policies for water and agriculture; Timeline: policies of the last 20 years, with a higher focus on current strategies with a future vision of 15-20 years; Objectives of policy review: what do the policies say about productive and efficient use of water; Types of policies to be reviewed: national policies of ministries (e.g., agriculture, water, environment).
	2	Collect water and agriculture related policy documents	Collection of policy documents from online sources (ministries and organizations involved in water and agriculture sector) and by requesting them through people in our network who have close ties to policy processes (e.g., embassies and senior scientists who are involved in policy formulation and implementation).
Analyse	3	Read and highlight water productivity aspects	Highlight key aspects that are important given the objective of the policy review.
	4	Extract main policy targets and objectives	Determine the key priorities of the document, and interpretations for productive water use.
	5	Compare across policies	Identify changed priorities for agricultural development and water use over time, and synergies and conflicts across different policies.
	6	Triangulate findings with step 5	(Briefly) review scientific literature to triangulate the findings on water and agricultural policies, targets, and objectives.
	7	Summarise main findings	Create a draft working document that summarises the main findings of the policy review in a one-page document.

Policy Analysis Framework

Validate and Complete	8	Validate	Share the working document with experts who are familiar with the different policies and their influence on land and water management in the country.
	9	Adjust and complete the review	Incorporate the feedback in the working document, and finalise the review into a Policy Review Report.
Policy Influence	10	Decide (and take) next steps	Consider next steps how the findings of the review can be used effectively, for instance as input for a policy dialogue between countries or ministries, as discussion piece for policy makers of the same ministry, start of a Twitter campaign or other policy advocacy.

Application of Policy Framework Analysis



Application for Egypt: Agricultural development strategies

Policy targets:

- Maximizing benefits derived from water in various economic sectors.
- Rationalizing water use in agriculture.
- (Near) self-sufficiency in specific goods (wheat, maize, sugar).
- Promoting low water consuming crops and virtual water trade.
- Promoting exports.
- Expansion of agricultural area and production by improving irrigation efficiency.

Main Reviewed Policy Documents:

- National Water Resources Plan (NWRP) (2005)
- Sustainable Agricultural Development Strategy (SADS) towards 2030

'Vertical' Expansion

- Raise production in existing agricultural land
- Staple crops
- Domestic market
- "Old lands"

'Horizontal' Expansion

- New agricultural land
- High value crops
- Export market
- "New lands"

Pictures: Facts and Details, adapted from https://bit.ly/34K6B9p

Implications for strategies for water productivity

INDICATOR	EXPLANATION	SCORE
Biophysical water productivity	Yield (kg) per m3 of water consumed	1 (very low) 5 (very high)
Land productivity	Yield (kg) per ha	1 (very low) 5 (very high)
Economic water productivity	Economic value ($) per m3 of water consumed	1 (very low) 5 (very high)
Food security	Access for all people at all times to enough food	1 (very low) 5 (very high)
Food self-suffiency	Ability to meet food needs from own production	1 (very low) 5 (very high)
Employment	Number of jobs generated by the agricultural sector	1 (very low) 5 (very high)
Environmental sustainability	Responsible interaction with the environment to avoid depletion or degradation of natural resources	1 (very low) 5 (very high)

Application for Egypt

Go to www.menti.com via your phone
and use the code 5633 3795 (5 min.)

‘Vertical’ Expansion

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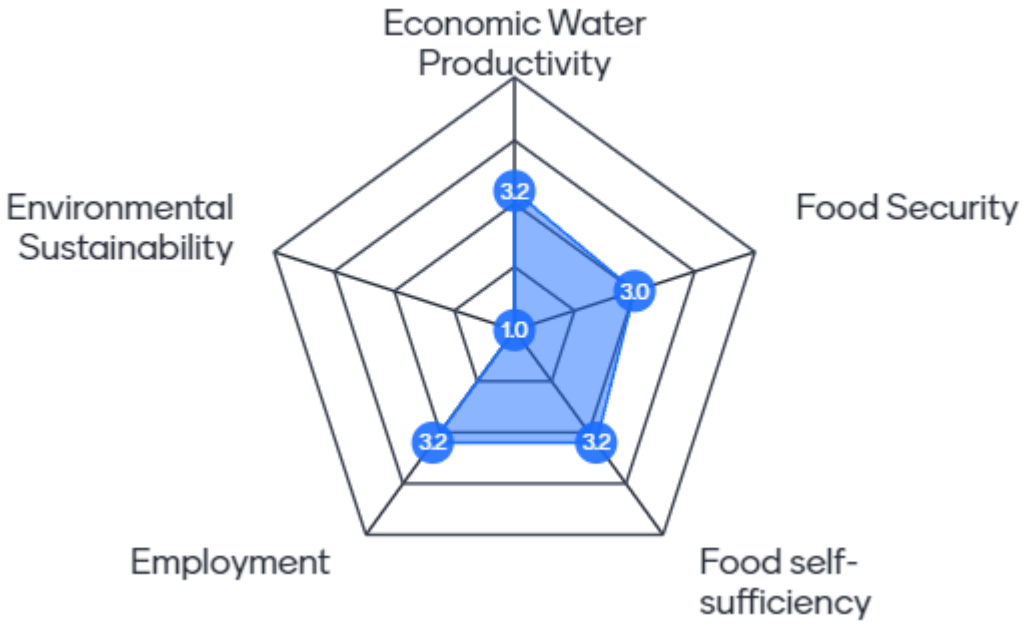
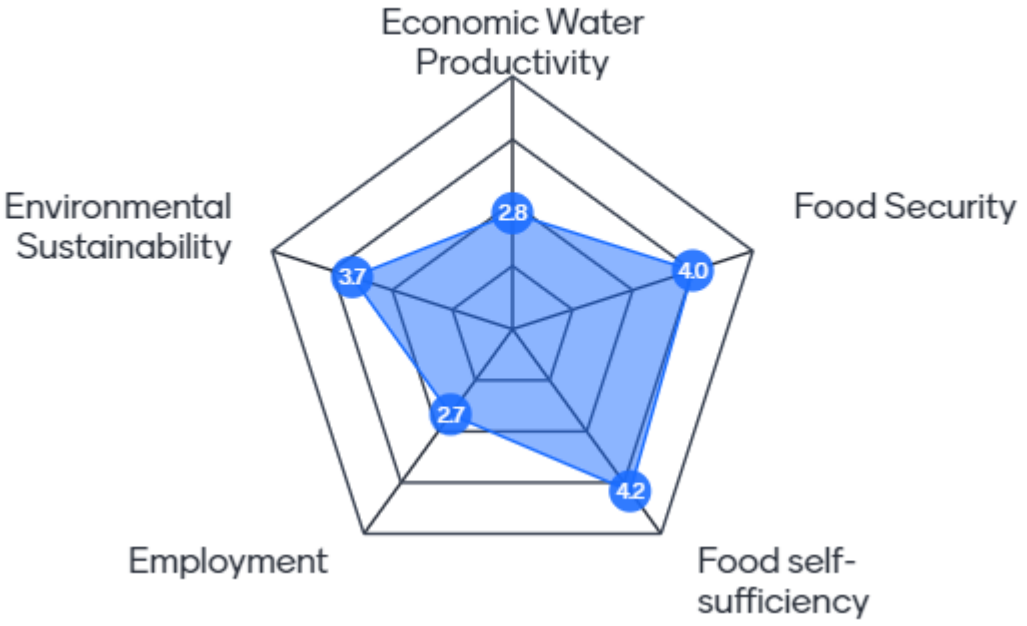
Results (from interactive session)

WaterPIP
Water Productivity Improvement in Practice

Horizontal Expansion Strategy



Vertical Expansion Strategy



WaterPIP

Water Productivity Improvement in Practice

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META

eleaf FEED THE WORLD

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