

**CPBRD-PIDS
Knowledge Sharing Forum
on the
Assessment of the
Free Irrigation Service Act (RA
10969)**

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Philippine Institute for Development Studies

Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

FREE IRRIGATION POLICY

History of O&M

Implementation of FISA

Related literature and study method

Results and Discussion

Summary and recommendations

History of O&M

Early history until 2000

Since the Irrigation Act of 1912 (Act No. 2152), cost recovery policy for O&M by charging irrigation water users provided by law.

World Bank assessment (1960s):

- maintenance for irrigation and drainage the country was mediocre;
- water charges were unrealistically low;
- many farmers have not paid even these low charges.

For CIS: IAs/ISCs receive no support for O&M (default cost recovery)

In 1974, PD 552 granted NIA broader powers and authority

- upward adjustment of the irrigation fee rate
- Estrada Administration (1998): suspension of NIA collections.
- ISF was re-imposed within six months under a socialized structure.

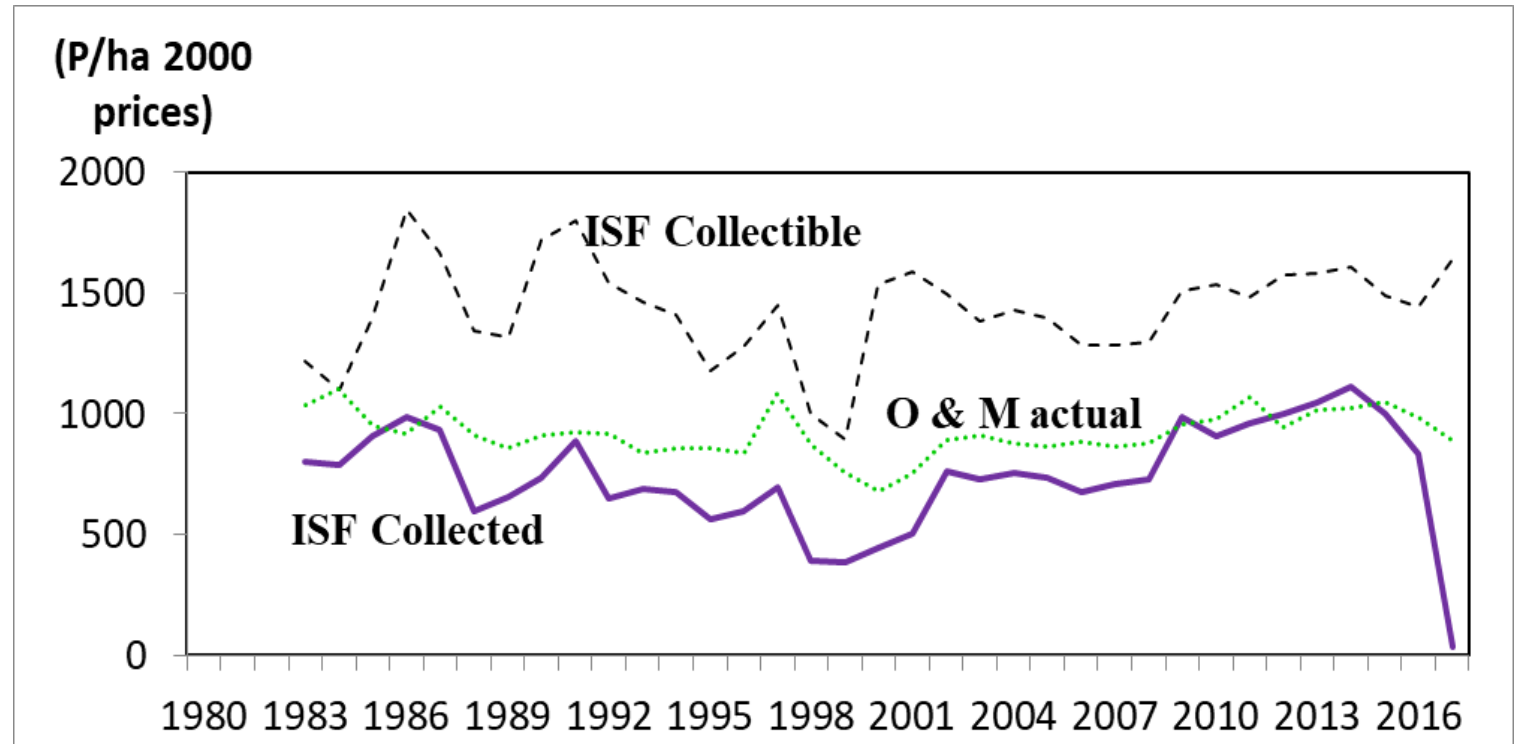
Irrigation Management Transfer

From 1999:

- Model 1: Maintenance of canals delegated to IAs; IA is compensated based on canal area maintained and existing labor rate.
- Model 2: Turnover of management of lateral canals to IAs; the latter receive 30 percent of the ISF collected.
- Model 3: Turnover of management of main and lateral canals to IA federation; the latter receive 30 percent of ISF collected.
- Model 4: Complete turnover of NIS to IAs; IAs pay only an annual rental fee (equivalent to 75-100 kg palay per ha).

Trends in O&M and ISF

- O&M expenses typically higher than ISF collections (except briefly in 2011-14).
- Collectible ISF usually in excess of O&M expenditure
- NIA encumbered from full collection – cannot exclude non-payers from irrigation service.



Implementation of free irrigation service

For NIS, apply IMT scheme:

- NIA responsible for developing, operating, and maintaining NIS: may delegate the O&M of secondary and tertiary canals and farm ditches to capable IAs
- Capability of IAs to be determined by survey. Capable IAs sign IMT contract: state performance standards and O&M subsidy
- IA shall be provided Php 150 per ha per season + maintenance subsidy Php 1,750 per canal section → 3.5 km for earth canals, and 7 km for concrete-lined canals
- NIA monitors IAs and conducts seasonal performance evaluation
- Failure to meet contractual obligations implies termination of IMT: NIS reverts to full control and responsibility of NIA

Implementation of free irrigation service

For CIS: Already subject to IMT

- IAs full responsibility for O&M (including for primary structures); IMT policy and guidelines in NIS to be adopted in CIS (with same subsidy)
- Amortisation, interest, penalty payments waived

Other provisions:

- Farmers above 8 ha not exempt from ISF/amortisation; debts not condoned
- NIA to focus on contract design, technical assistance to IAs, monitoring
- Funding for NIA and annual subsidy through GAA

Related literature and study method

Typology of water pricing

- **Area-based charge:** ISF charged per unit area served, adjusted for type of crop; e.g. Nigeria, Kazakhstan, Indonesia, Pakistan, Philippines, Vietnam, Japan.
- **Volumetric charge:** ISF charged per unit volume of water, e.g. many countries of MENA, Australia, Southern Europe; United States.
- **Mix of area-based + volumetric:** e.g. Spain, Colombia, Lebanon, Morocco.
- **Quota and fixed charge:** user assessed a fixed charge up to a certain amount; possibly volumetric price above the quota
- **Market-based pricing:** prices are set by supply and demand in market-based pricing (e.g. auctioning off of water access)

Impact of free irrigation - Vietnam

Pros:

- Farm net income increased by an average of \$20 per household per year
- Irrigated area increased 3% - 5% in some areas: financial stability of irrigation and drainage management companies (IDMCs)

Cons:

- Government slow to update cost norms of IDMCs, leading to underfunding and erosion of O&M.
- Making irrigation free effectively severs the link between water user organisations and the IDMCs.

Impact of free irrigation – Philippines

(NIA, 2016; Fullon et al, 2018)

Advantages of cost recovery policy

- Ensure funding of O&M
- Sustain partnerships with IAs
- Strengthen self-reliance of IAs
- Incentivize management of IS

Advantages of free irrigation policy

- Cost of production of farmers to decline by 3.4% to 6.1%
- NIA can better focus: planning, design, construction, restoration, rehabilitation, O&M, capacity building of IAs

Options for cost recovery and IMT

<i>Who pays?</i> <i>Who Manages?</i>	Government	Users
Government	<ul style="list-style-type: none"> • Government manages system • Government shoulders O&M 	<ul style="list-style-type: none"> • Government manages system • Users contribute to O&M
Users	<ul style="list-style-type: none"> • Users organize to manage irrigation system • Governments contribute funds for O&M 	<ul style="list-style-type: none"> • Users manage system • Users shoulder O&M

Participatory management

- IMT - the main institutional solution for irrigation management problems/poor system performance in the developing world.
- Earlier studies by World Bank - some favorable results from IMT.
- Araral (2011) has found that in NIS, IA-managed turnout service areas (TSA) are better-managed than NIA-managed TSAs, owing in part due to the perception of legitimacy: → offense versus peers is different from offense against impersonal bureaucracy
- However: The impacts of management transfer are rarely uniform or consistent across the various social, technical, and financial settings

Research issues and strategy

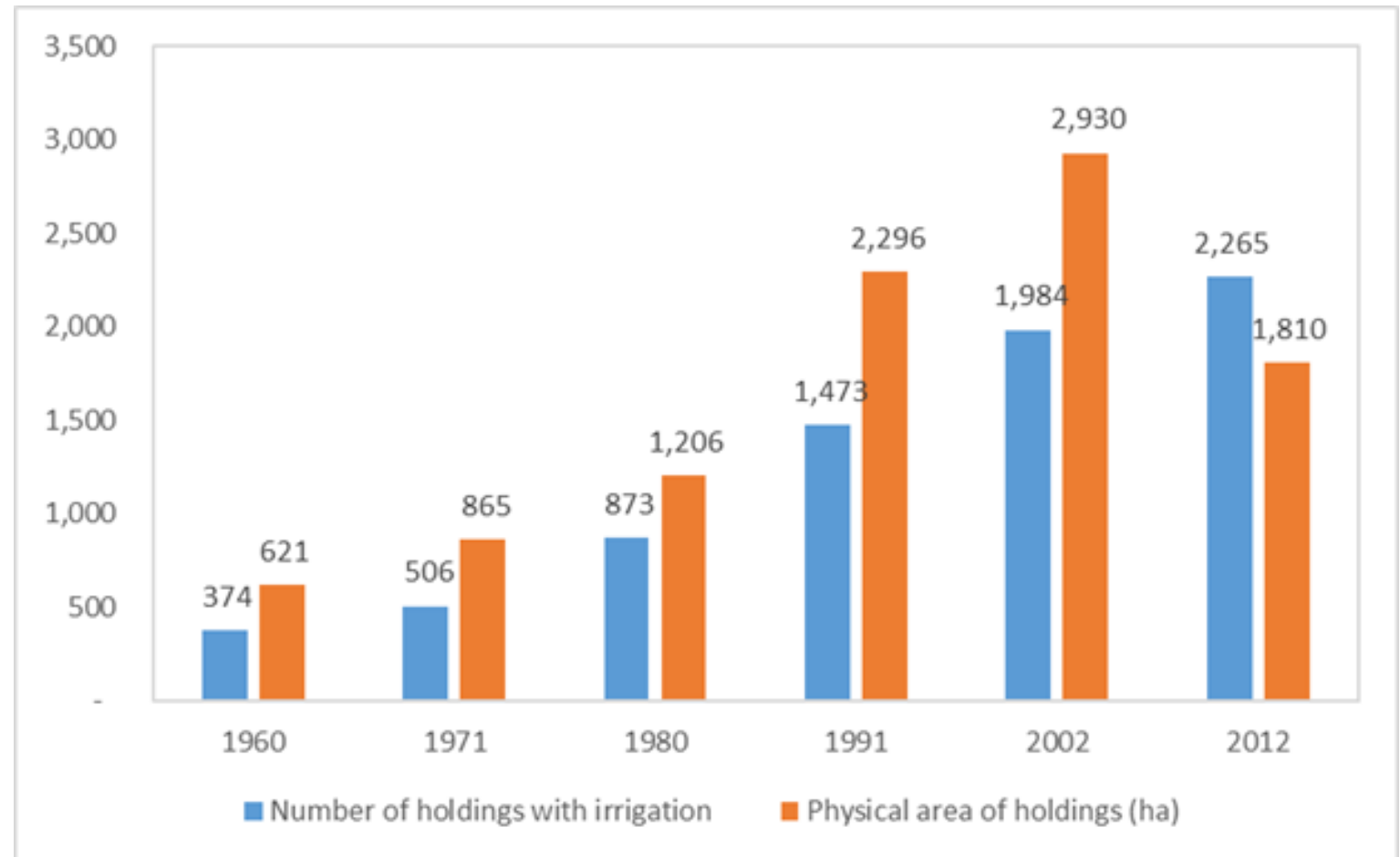
- Equity – who will be impacted by free irrigation?
- Efficiency
 - More efficient way to achieve equity objective?
 - Inability to implementing water pricing
 - Operational issues:
- FGDs and KIIs:
 - IAs (NIS and CIS)
 - NIA staff (national, regional, field offices)

Results and discussion

Equity analysis

Free irrigation has the potential to benefit millions of individuals.

98% of all parcels, 78% of all area, composed of holdings 7 ha and below



Equity analysis

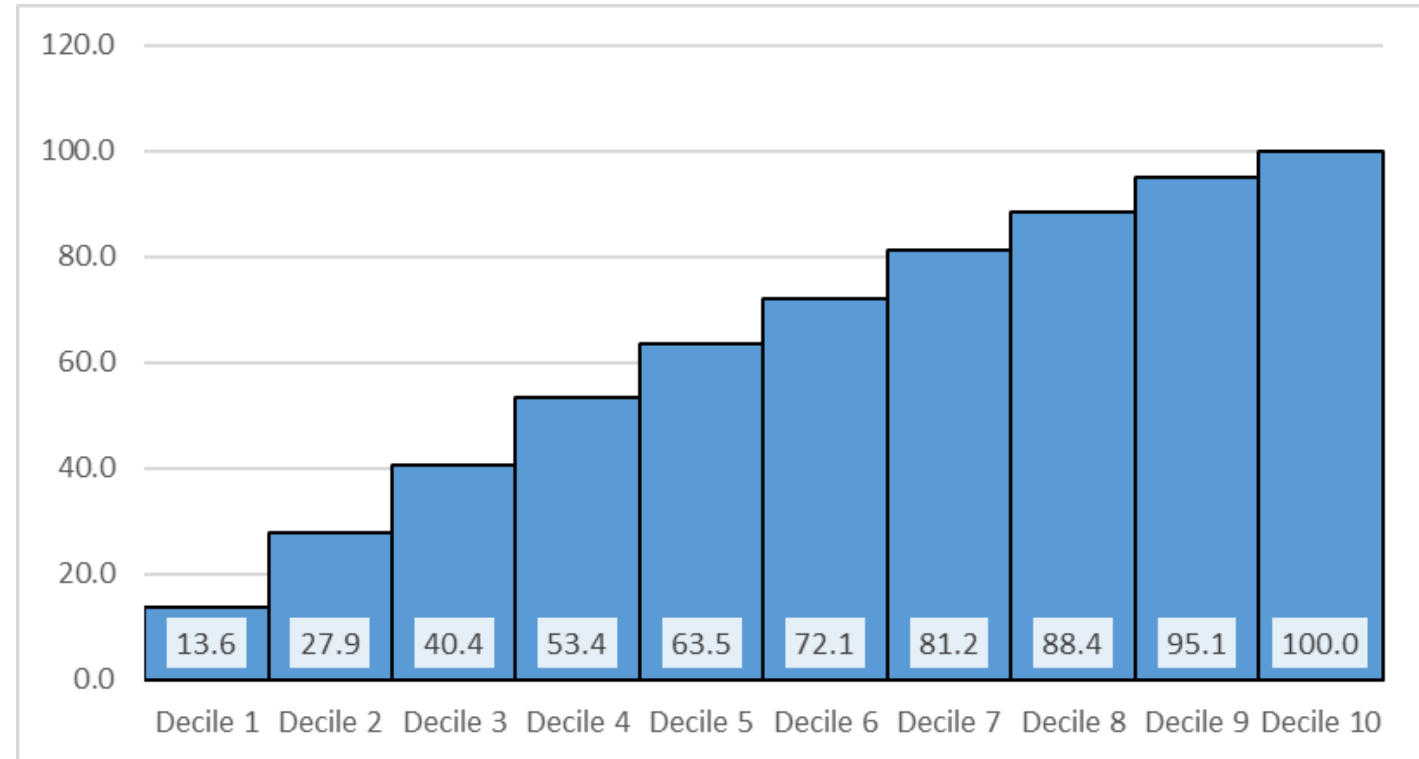
	Share in cash cost (%)		Share in total cost (%)	
	2013	2017	2013	2017
PHILIPPINES	4.0	4.2	1.9	1.9

Free irrigation leads to only a small savings in palay production cost

Equity analysis

Palay farmers are poorer than the average household, but most of them are not poor.

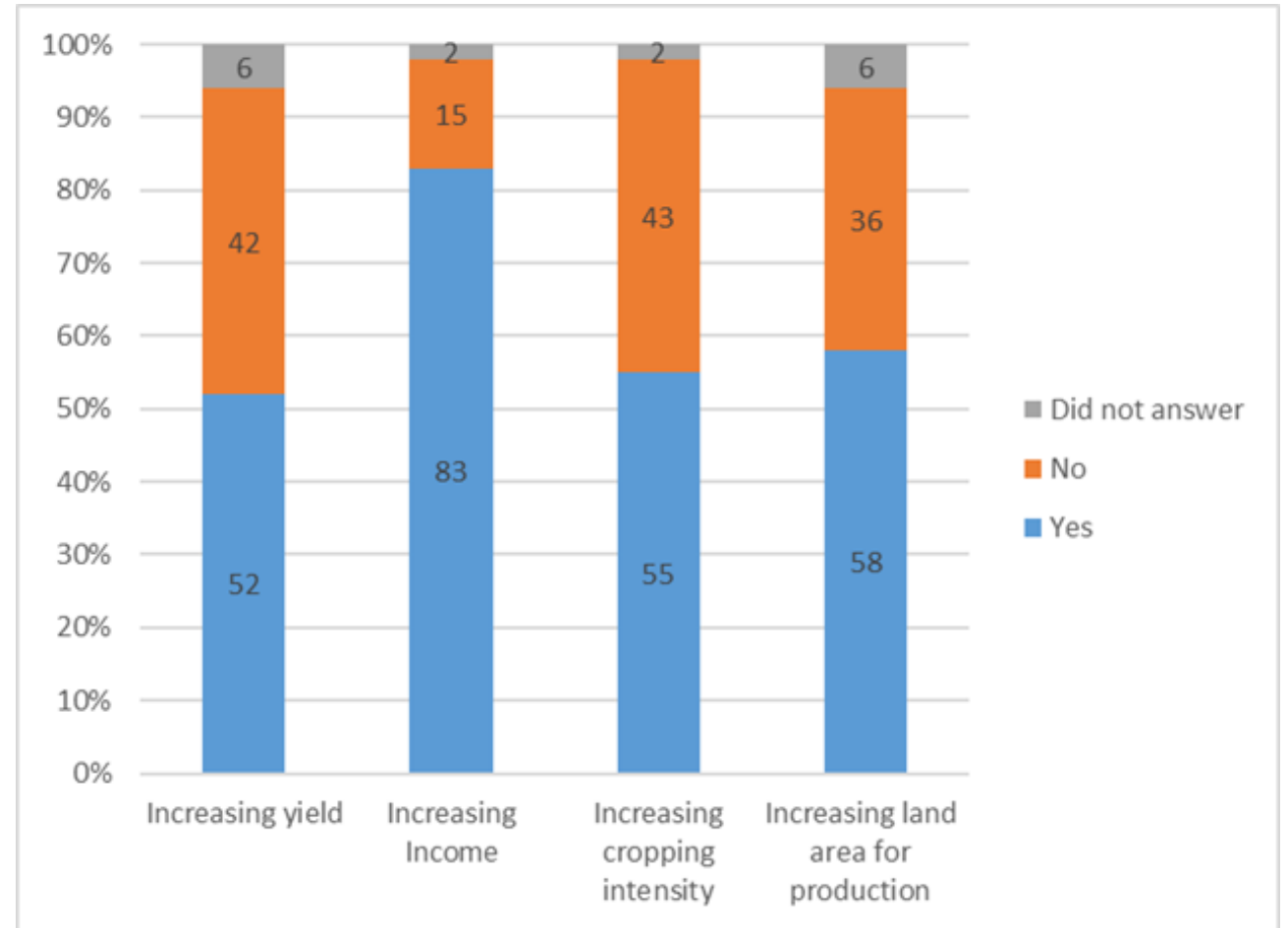
Cumulative distribution, rice farming households (%)



Operational issues: NIS

In NIS, cost recovery was associated with distorted incentives, failures in ISF collection, and inadequate level of O&M.

The main benefit to farmers from free irrigation is the savings from paying the ISF.



Operational issues: NIS

The shift to free irrigation in NIS addressed some distortions; but O&M subsidy has declined

In 2018:

- Service area under IMT: 698,143 ha
- Canal length: 24,054 km (16% lined)
- 0.03 km/ha irrigated (Php 20/ha!)
- O&M subsidy = Php 245 per ha per season; Php 650 per season previously

Examples of dissatisfied farmers

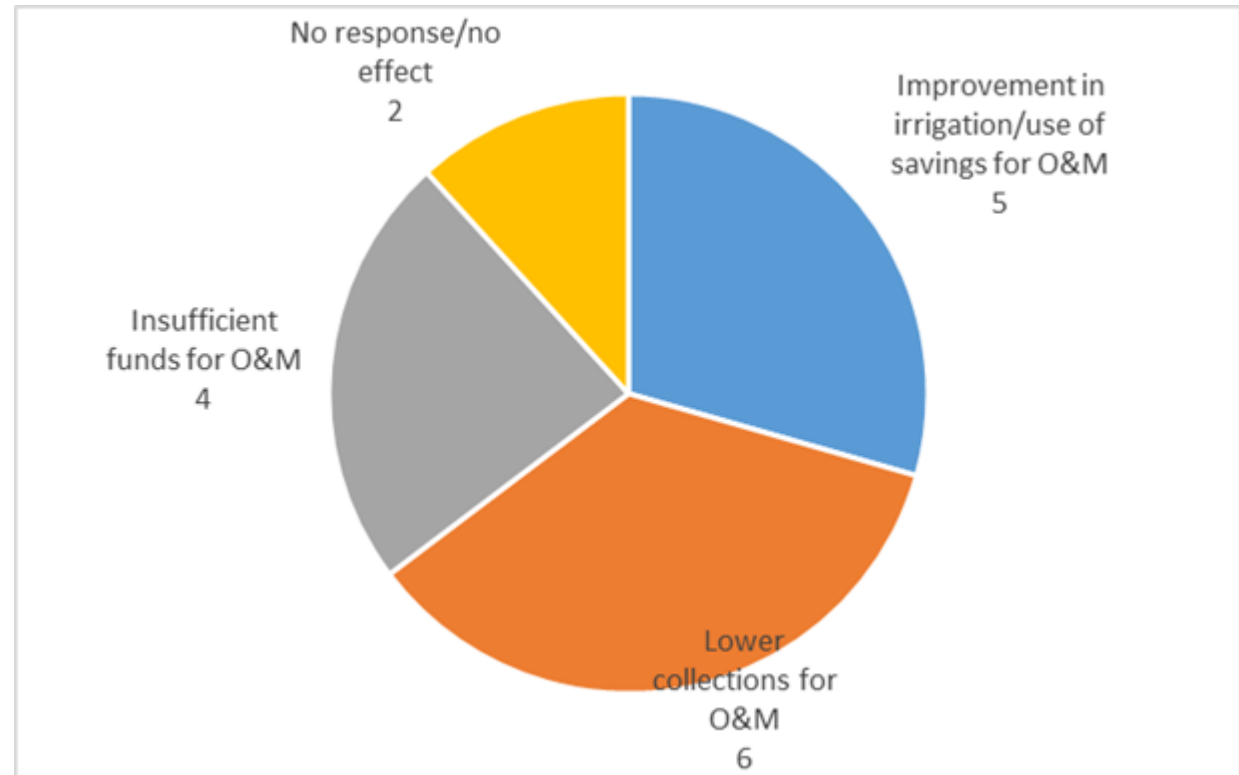
In the Jalaur system: main canal from the source suffers water shortage due to siltation. No improvement in system performance with free irrigation

In Roxas City: some IAs complain that laterals are only partially operational; Subsidies from NIA cannot cover the maintenance costs, esp. major repairs or rehabilitation

Operational issues: CIS

Free irrigation is seen to be beneficial in communal systems due to subsidy for O&M, and added incentive to undertake new projects.

Balance this off with: increased difficulty in collecting O&M contributions.



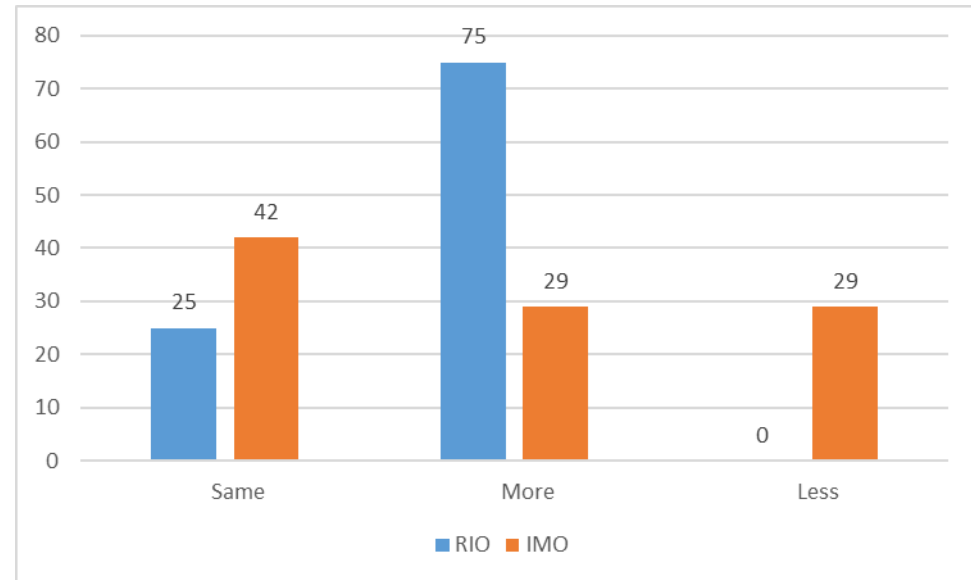
Operational issues: NIA

Overall, free irrigation policy to increase level of O&M (subsidy + IA contributions + NIA resources)

Incentive scheme based on cost recovery will need to be changed

NIA functions to be re-oriented: from ISF collection to capacity building, IMT administration

Share of respondents by comparison of O&M level before and after FISA implementation



Recommendations

1. Continue to pursue IMT within the context of free irrigation for both NIS and CIS, based on minimum maintenance and transparent standards, to stipulated in IMT contract
2. Provide for sustained and increasing O&M subsidy, but make it available only on a performance basis
3. Explore water-saving as a performance criterion in O&M subsidy
4. Transform NIA into a service providing agency specializing in technical assistance to IAs, contract design, and performance monitoring
5. Introduce a mandatory review comparing FISA with other social assistance and social protection schemes in achieving equity objectives.