

Supplementary

Table S1. Site description of the study sites

| Study Site | Location | Area (km ²) | Population | Density (Population/km ²) | No. of Barangay |
|-----------------|---|-------------------------|------------|---------------------------------------|-----------------|
| Puerto Princesa | 9° 44' North, 118° 44' East (9.7400, 118.7400) | 2,381.02 | 307,079 | 129 | 66 |
| Roxas | 10° 19' North, 119° 21' East (10.3196, 119.3430) | 1,177.56 | 69,624 | 59 | 31 |
| Taytay | 10° 50' North, 119° 31' East (10.8256, 119.5166) | 1,257.68 | 83,357 | 66 | 31 |
| El Nido | 11° 11' North, 119° 23' East (11.1795, 119.3913) | 923.26 | 50,494 | 55 | 18 |

Table S2. Summary information of the respondents

| Characteristics | Number | Percentage of total sample (%) |
|--------------------------------------|--------|--------------------------------|
| Gender | | |
| Female | 10 | 31.25 |
| Male | 22 | 68.75 |
| Employer Institution | | |
| Academic and research institutions | 12 | 37.5 |
| Government agencies | 16 | 50 |
| National civil society organizations | 2 | 6.25 |
| Private sector | 2 | 6.25 |

Table S3. Basic pair-wise comparison scale for AHP [61]

| Degree of importance | Definition | Description |
|----------------------|-----------------------------------|---|
| 1 | Equally important | Both are equally important |
| 3 | Slightly important | Slight importance of one attribute over the other |
| 5 | Important | Moderate importance of one attribute over the other |
| 7 | Very important | Strong importance of one attribute over the other |
| 2, 4, 6 | Middle values of the above scales | Degree of importance is middle between the above scales |

Table S4. Values of the Random Index (RI) for small problems [62, 63]

| m | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|----|---|------|------|------|------|------|------|------|------|
| RI | 0 | 0.58 | 0.90 | 1.12 | 1.24 | 1.32 | 1.41 | 1.45 | 1.51 |

Questionnaire S1: Sample questionnaire

Project Title: Strategic Implementation of Integrated Water Resource Management in Selected Areas of Palawan: SWOT-AHP Method

Pares na paghahambing ng SWOT Factors ng pagpapatupad ng IWRM.

Pairwise comparison of the SWOT Factors of IWRM implementation.

Ihambing ang Kadahilanan A sa Kadahilanan B at lagyan ng *check* (✓) ang isang naaangkop na numero.

Compare the Factor A to Factor B and please check (✓) one appropriate number.

| Factor A | Very important | | Important | | Slightly Important | | Equally | Slightly Important | | Important | | Very important | | Factor B |
|---|----------------|---|-----------|---|--------------------|---|---------|--------------------|---|-----------|---|----------------|----|---|
| Strengths | | | | | | | | | | | | | | |
| Updated local water policy and water management strategies | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Presence of framework for national IWRM plans |
| Updated local water policy and water management strategies | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Enhanced institutional relationship for IWRM implementation |
| Updated local water policy and water management strategies | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Implementation of sustainable and efficient water consumption |
| Updated local water policy and water management strategies | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | National investment budget sufficiency |
| Presence of framework for national IWRM plans | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Enhanced institutional relationship for IWRM implementation |
| Presence of framework for national IWRM plans | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Implementation of sustainable and efficient water consumption |
| Presence of framework for national IWRM plans | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | National investment budget sufficiency |
| Enhanced institutional relationship for IWRM implementation | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Implementation of sustainable and efficient water consumption |
| Enhanced institutional relationship for IWRM implementation | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | National investment budget sufficiency |
| Implementation of sustainable and efficient water consumption | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | National investment budget sufficiency |

| Weaknesses | | | | | | | | | | | | | | |
|---|----|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Low enforcement of legislated water related national policies and laws | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Slow improvement on capability building and development |
| Low enforcement of legislated water related national policies and laws | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited stakeholder participation |
| Low enforcement of legislated water related national policies and laws | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Absence of national monitoring for feasible water source |
| Low enforcement of legislated water related national policies and laws | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Lack of civil society participation into water resource management |
| Lack of civil society participation into water resource management | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Slow improvement on capability building and development |
| Lack of civil society participation into water resource management | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited stakeholder participation |
| Lack of civil society participation into water resource management | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Absence of national monitoring for feasible water source |
| Slow improvement on capability building and development | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited stakeholder participation |
| Slow improvement on capability building and development | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Absence of national monitoring for feasible water source |
| Limited stakeholder participation | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Absence of national monitoring for feasible water source |
| Opportunities | | | | | | | | | | | | | | |
| Presence of huge watersheds areas and large number of river basins | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Growing partnership between governmental agencies, NGO's and developmental partners |
| Presence of huge watersheds areas and large number of river basins | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Existence of water infrastructure agency |
| Presence of huge watersheds areas and large number of river basins | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Presence of water resources related studies |
| Growing partnership between governmental agencies, NGO's and developmental partners | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Existence of water infrastructure agency |

| | | | | | | | | | | | | | | |
|---|----|---|---|---|---|---|---|---|---|---|---|---|----|---|
| Growing partnership between governmental agencies, NGO's and developmental partners | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Presence of water resources related studies |
| Existence of water infrastructure agency | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Presence of water resources related studies |
| Threats | | | | | | | | | | | | | | |
| Increasing population pressure and industrialization | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Increasing negative impacts of climate change |
| Increasing population pressure and industrialization | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Increasing water resources stress-inductors |
| Increasing population pressure and industrialization | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited institutional manpower resources capacity |
| Increasing population pressure and industrialization | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Water pollution |
| Increasing negative impacts of climate change | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Increasing water resources stress-inductors |
| Increasing negative impacts of climate change | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited institutional manpower resources capacity |
| Increasing negative impacts of climate change | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Water pollution |
| Increasing water resources stress-inductors | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Limited institutional manpower resources capacity |
| Increasing water resources stress-inductors | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Water pollution |
| Limited institutional manpower resources capacity | ◀◀ | ▼ | ▲ | ▶ | ◀ | ☐ | ☐ | ☐ | ◀ | ▶ | ▲ | ▼ | ◀◀ | Water pollution |

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