



GROUP: 1





ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
<p>1. Federal & States' Jurisdiction</p> <ul style="list-style-type: none">- Federal formulates the policy but states implement the policy- Conflict in revenue generation and policy implementation	<ul style="list-style-type: none">• Shared vision• All States to create Enactment on Water Resources and clear institutional arrangement	<ul style="list-style-type: none">• Ensure uniformity of law on water resources in all states E.g. RUU SA as model law (in parts or in totality).• All identified water catchment be gazetted in each state by the respective State Government (specify provision under Section 10 of the National Forestry Act (NFA)).• Explore inter-state water supply transaction mechanism for water resource conservation, e.g. PES.



ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
2. States' ability to implement and enforce the policy - E.g. Lack of funding, technical assistance	<ul style="list-style-type: none">• Capacity building• Prioritisation – limited resources	<ul style="list-style-type: none">• Strengthen the capability of administrators in key planning position to translate national development plans at the state and local level.• Fund allocated to states which prioritised protection of water catchment areas.
3. Lack of political will - Need to plan beyond 5 years - Do not politicise water issue	<ul style="list-style-type: none">• Water is valued as an ecosystem service and a finite resource.	<ul style="list-style-type: none">• Study to increase water tariff just like electricity tariff.• Internalising the value of water as part of lifestyle and culture.



ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
4. Lack of awareness on the value of water	<ul style="list-style-type: none">• Change mindset through education, campaigns, outreach programmes• Using social science and humanities analytics as a tool to enhance understanding on local value of water.	<ul style="list-style-type: none">• Economic valuation of water / cost-benefit analysis e.g. loss of opportunity, investment for restoration.• Identify and translate the shared values among the public on water conservation as a way of life.
5. Lack of R&D	<ul style="list-style-type: none">• Target-oriented research – NAWABS, all river basins• Benchmarking study on Malaysian performance	<ul style="list-style-type: none">• Complete NAWABS in all river basin within 5 years.• Smart partnerships with universities and research organisations for action-oriented outcomes.• Review and monitor Malaysian performance against well-defined KPIs.



ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
<p>6. Existing strategic reports not being publicised / published / disseminated widely</p> <ul style="list-style-type: none">- E.g. ASM publication: National Integrated Water Resources Management Plan	<ul style="list-style-type: none">• All public funded research/ studies/ publications need to be made available to all.	<ul style="list-style-type: none">• Develop more effective way to disseminate key findings of existing strategic reports• Need technical advisors to contextualise the policy reports/ translate into action plan.• Create a clearing house mechanism for all water-related reports, e.g. DOE library.



ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
<p>7. Data integration/sharing</p> <ul style="list-style-type: none">- Strong ownership of data and not willing to share data with Federal / States / other Ministries/ Agencies (some Agencies charge for their data)	<ul style="list-style-type: none">• Improved data access and coordination.	<ul style="list-style-type: none">• Revisit MYGDX: Malaysia Government Central Data Exchange – system by MAMPU.• Develop standardised protocol to enable data quality by various organisations.



ISSUES/ CHALLENGES	WAY FORWARD	STRATEGIES
8. Inclusion of local communities to steward the water catchment	<ul style="list-style-type: none">• Empower the local communities to be involved in the planning to the monitoring of water resources management.	<ul style="list-style-type: none">• Build the capacity of local communities through training programmes.• Local communities being involved in the long-term water quality management to support government agencies for better decision-making.• Reciprocal action by key government agencies on action based on information provided by local communities.• To delegate powers of enforcement to river rangers on water quality (e.g. wildlife warden in Sabah & Sarawak).



GROUP 2: Water Supply and Sewerage Services



WAY FORWARD

- 1. Establishment of water stakeholders common communication platform headed by KATS**
- 2. Establishment of surveillance body to monitor the implementation of policies and plans**
- 3. Periodic tariff adjustment to cover opex of water and sewerage operator**
- 4. Establish effective lead enforcement agency at state level according to IRBM plan**
- 5. All states to gazette IRBM plan**
- 6. To address issue on upgrading aging pipeline in rural areas**
- 7. Deposit for road excavation permit to be reduced**



GROUP: 3



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
<p>Harmonising Water Sector Governance</p> <ul style="list-style-type: none">• Tiada Penyelarasan Akta @ Undang2 diantara Kerajaan Negeri dan Persekutuan	<ul style="list-style-type: none">• Penerimaan RUU Sumber Air (RUU SA) di peringkat Negeri• Penubuhan Pihak Berkuasa Air peringkat Negeri (eg. LUAS, BKSA, LSANK)• Penambahbaikan Undang-Undang sedia ada
<p>Streamlining Water In Spatial Planning</p> <ul style="list-style-type: none">• Pengetahuan Agensi berkaitan mengenai Polisi sedia ada 'Spatial Planning' (eg.RFN)• Penglibatan Pengurusan atasan didalam proses penyediaan Perancangan Pembangunan Sektor Air Negara	<ul style="list-style-type: none">• Keperluan penyebaran Data secara meluas anantara agensi (Data Sharing)• Pembentukan Jawatan Kuasa yang diwakili setiap pengurusan atasan.• Pengunapakaian 'spatial planning' (RFN,RSN,RT) di peringkat agensi dan PBT.



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
<p>Empowering Non-State Actors and Local Communities</p> <ul style="list-style-type: none">• Kesedaran Komuniti terhadap kepentingan Sumber Air	<ul style="list-style-type: none">• Meningkatkan kesedaran komuniti melalui program & kempen mengenai kepentingan sumber air• Pemberian Insentif daripada PBT dan agensi kepada komuniti yang menjaga kepentingan sumber air
<p>Expanding Business Opportunities for Water Players</p> <ul style="list-style-type: none">• Isu Perancangan pelaksanaan pembangunan sektor air• Perancangan tidak menyeluruh dan tidak memberi impak yang besar	<ul style="list-style-type: none">• Perancangan perlu diselaraskan dengan peruntukan bajet dan tempoh masa pelaksanaan.• Mengambil kira faktor-faktor luaran dan kesan jangka masa panjang



GROUP: 4 (WATER QUALITY)



ISSUES/ CHALLENGES

1. Water resource under state purview

- i) Capacity building**
- ii) Human resource**
- iii) Budget (state government need to set KPI, allocation budget for water resource protection**
- i) Adoption of RUU Sumber Air (Model Law) by states.**
- ii) State to develop their own law/legislation**
- iii) Gazetting the water catchment area**

2. Working and achieving in silo (not integrated)

- i) Majlis Air Negara**
- ii) Centralised data base (sharing**
- iii) Resource (eg: facilities, equipment, cost etc) and expertise (human resource) - sharing resources between Federal & State**
- iv) Set and share common water quality target**
- v) Private-Private Partnership for water quality**



ISSUES/ CHALLENGES

STRATEGIES/ WAY FORWARD

3. Different water quality standard by different agencies (MOH,DOE)

- i) Harmonized /Standardized water quality standard**
- ii) Identify prevailing agency (custodian) for water quality standard**

4. Heavy / large pollution load in water body

- i) Centralised industrial treatment facility**

5. Lack of community involvement

- i) Bottom-Top approach (eg: citizen eye)**
- ii) Empowered the Majlis Pengurusan Komuniti Kampung (formerly known as JKKK)**

6. Sullage pollution

- i) Local Authority should imposed control and management of sullage (wet market effluent control -eg: install & maintain the oil & grease remover)**

7. Lack of enforcement

- i) Inter-agency enforcement (eg: police) for pollution control**
- ii) Delegation of power to various agencies**



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
8. Spatial control (for sanitary landfill)	i) Strategic planning
9. Political interference	i) Reduce political interference (let the professional play their role/decision) i) Name and shame ii) Rule of Law



GROUP 5: WATER AS AN ASSET

ENABLING THE ENVIRONMENT FOR WATER AS AN ASSET



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
Financial Constraint for Water Infra (CAPEX and OPEX)	<ul style="list-style-type: none">• Full cost recovery• Putting value to positive water (irrigation)• Income generation – Self sustenance• Circular Economy
Sustainable & Balanced Governance <ul style="list-style-type: none">• Fragmented organization working for water governance• Majlis Air Negara ? Federal vs State?	<ul style="list-style-type: none">• Mindset change• Horizontal engagement• Community involvement
Facilitation & Awareness Creation <ul style="list-style-type: none">• Lacking of ownership	<ul style="list-style-type: none">• Involvement of non-state actors (Yayasan & NGOs)• Community involvement
Legislation & Enforcement <ul style="list-style-type: none">• Segregation of power• Grey area enforcements	<ul style="list-style-type: none">• Strengthen ruler pertaining grey areas• Consolidate existing enforcement legislation
Capacity Building <ul style="list-style-type: none">• Knowledge• Manpower• Aging workforce	<ul style="list-style-type: none">• Continuous knowledge transfer• Continuous capacity Building



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
<p>Resilience</p> <ul style="list-style-type: none">• Water resources storage prone to risk and climate change impact• Low reserve margin	<ul style="list-style-type: none">• Modelling and simulate climate change prediction• Increase reserve margin to at least 15%



- Sustainable balance
- Budget Allocation
- Facilitation & Awareness Creation
- Legislation & Enforcement
- Capacity Building
- Resilience



GROUP 6:

Water-related Disaster Risk Management



ISSUES/ CHALLENGES	STRATEGIES/ WAY FORWARD
1. Conflicting priorities between state and federal (development vs preservation)	Exploring ways to encourage states to invest in green infrastructure e.g. fiscal transfer based on national forest cover
2. Demands for future development and disaster risk reduction strategies	Improving risk communication and governance & integrating risk-based method into cost-benefit analysis
3. Lack of participatory based community programme for disaster risk reduction	Empowering and mobilising communities in disaster risk management
4. Insufficient number of early warning system in disaster prone areas (current and future)	Increasing resources and strategic R&D for early warning system
5. Fragmented and unstructured capacity building programme for awareness and preparedness	Consolidating national, state, district and local level platforms. Example: Kemaman template
6. Technological investment for reducing current disaster and preventing future risk	Embracing digital technologies and data analytics platform for integrated disaster risk management
7.	

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