



Urban Flood Management

STAKEHOLDERS

General Public	Municipal Authorities	National Flood Planners	Emergency Response Authorities	Spatial Planners	Water Supply & Sanitation Services	Civil Defense Authorities	Non-Governmental Organizations	Property Developers
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URBAN AREA CHARACTERISTICS

LOW Soil storage capacity	HIGH Population density	HIGH Runoff	HIGH Vulnerability
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HUMAN ACTIONS CAN EXACERBATE FLOODING

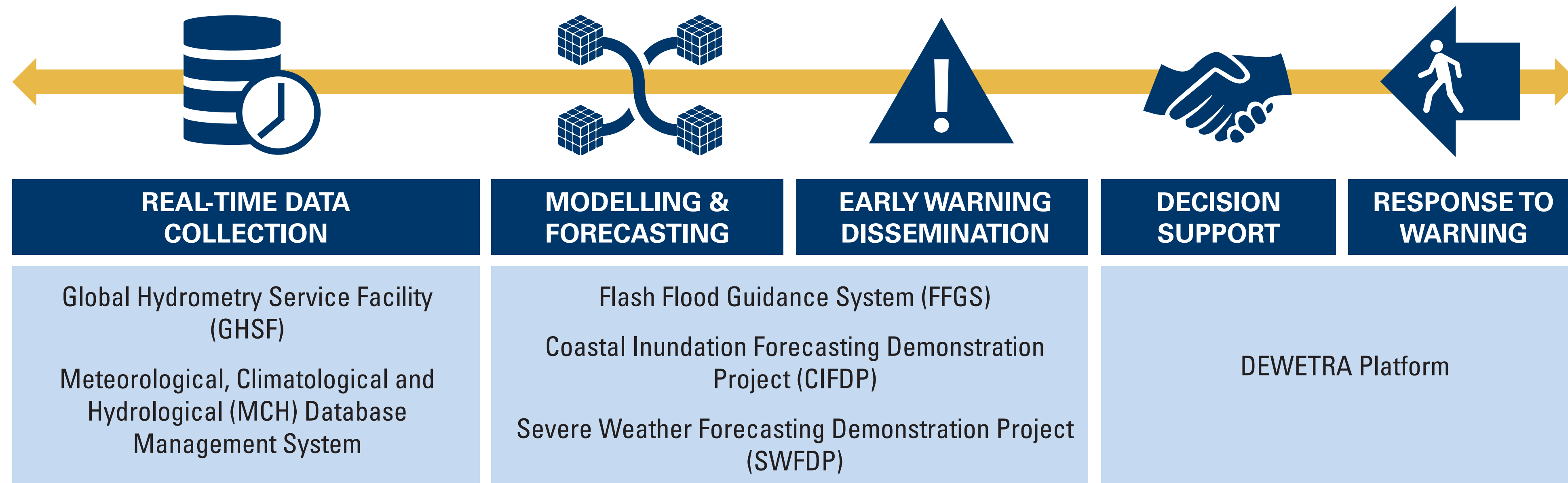
Poorly planned land use	Impermeability of soils	Floodplain occupation	Increased vulnerability of informal settlements	Poor maintenance of drainage infrastructure	Improper disposal of solid waste
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ACTIONS

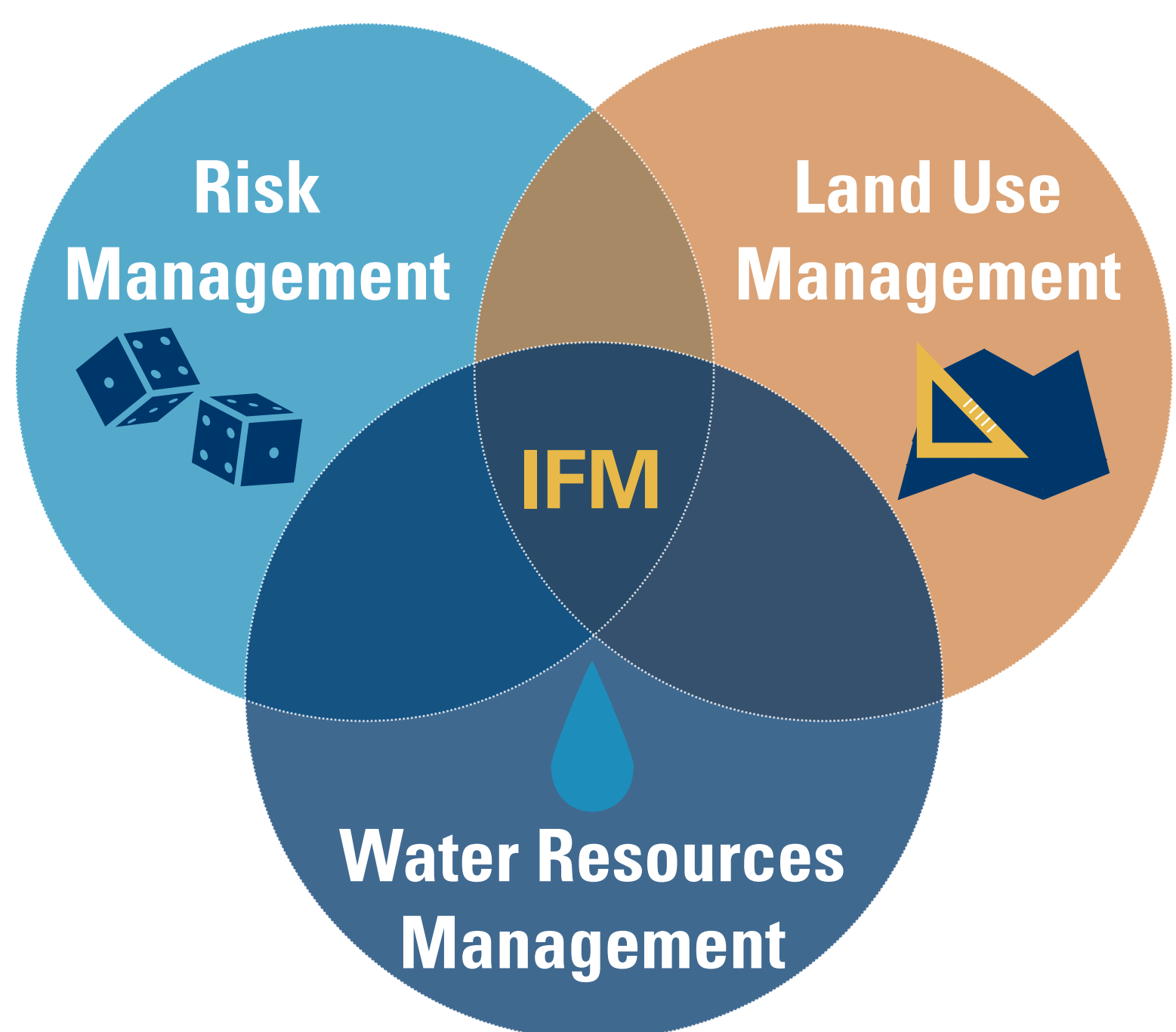
CHALLENGES	STRUCTURAL MEASURES	NON-STRUCTURAL MEASURES	OBJECTIVES
<ul style="list-style-type: none"> Climate change impacts Lack of financing Socio-economic vulnerabilities Poor Governance Demographic growth Low adaptive capacity 	<ul style="list-style-type: none"> Reduce runoff Improve runoff retention Optimize drainage systems Enhance river capacity Create diversion channels 	<ul style="list-style-type: none"> Flood risk mapping & zoning Flood forecasting & early warning systems Land use planning Flood proofing Enforcing codes for building & municipal drainage Insurance Disseminate flood risk information Develop & test emergency management plans Train emergency teams 	<ul style="list-style-type: none"> Improve population safety and quality of life Reduce losses and vulnerability Reduce uncertainty in economic sectors Conserve the environment

How can we help?

We support National Meteorological and Hydrological Services through the **Associated Programme on Flood Management** which provides guidance materials and help on End-to-End Early Warning System for Hydrometeorological Hazards



What is Integrated Flood Management?



IFM integrates **land use** and **water resources** in a river basin, in accordance with Integrated Water Resources Management, with the objective of **maximizing net benefits** derived from the use of floodplains and **minimizing loss of life** due to flooding. IFM keeps in consideration environmental preservation, balancing development needs with **flood risk** towards **sustainable development**.

What are our core activities?

<p>Assistance in developing national strategies</p> <p>National strategy development has been supported in:</p> <ul style="list-style-type: none"> South Asia (Thailand, Pakistan) Africa (Kenya, Zambia, Volta basin countries) Latin America (Mexico, Paraguay) 	<p>Capacity Building & Training</p> <p>Vocational training</p> <p>Short training and workshops for different target groups</p> <p>Material & expertise on integrated flood management, urban flood management and community-based approaches</p>	<p>IFM Helpdesk</p> <p>Request assistance for the preparation of project proposals, advice and supervision on implementation</p> <p>Technical expertise from 30 Support Base Partners</p>
<p>Guidance Materials</p> <ul style="list-style-type: none"> 1 Concept Paper 4 Policy Papers for policy makers and flood managers 25 Tools for practitioners + Case Studies & Training Manuals 	<p>Regional Pilot Projects</p> <p>Pilot projects have been undertaken in:</p> <ul style="list-style-type: none"> South Asia (community-based approaches) Africa (flood management strategies) Central and Eastern Europe (flash floods) 	