

Module 6: Mainstreaming adaptation into development

6.1. Adaptation in the development context

LEG training workshops for 2012-2013
- Anglophone LDCs workshop



In this module

Where are we?

Module 1: Setting the stage

Module 2: Implementation strategies for the NAPA

Module 3: Accessing financial resources for the implementation of NAPAs

Module 4: Best practices and lessons learned

Module 5: Tracking progress, M&E

Module 6: Mainstreaming adaptation into development

6.1. Climate change & adaptation in the development context

6.2. Integrating adaptation into development

6.3. National development processes

6.4. Adaptation Goals

Module 7: Best practices and lessons learned

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CASE STUDIES + REGIONAL INPUTS

Learning points:

- Projected changes in the climate for the African region;
- How current and future climate change impacts on development.

Guiding questions:

- Which areas of development are most at risk to climate change?
- What will be the nature and magnitude of the impacts?



Definitions

Development:

“The pursuit or attainment of well-being in all its dimensions, including economic sufficiency, social equity, personal security, good health, opportunity, and personal freedom.” (Heather McGray et al, 2007);

Sustainable development:

“Development that meets the cultural, social, political and economic needs of the present generation without compromising the ability of future generations to meet their own needs.” (IPCC 2007).

Adaptation:

“**Adjustment** in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities” (IPCC, 2007);

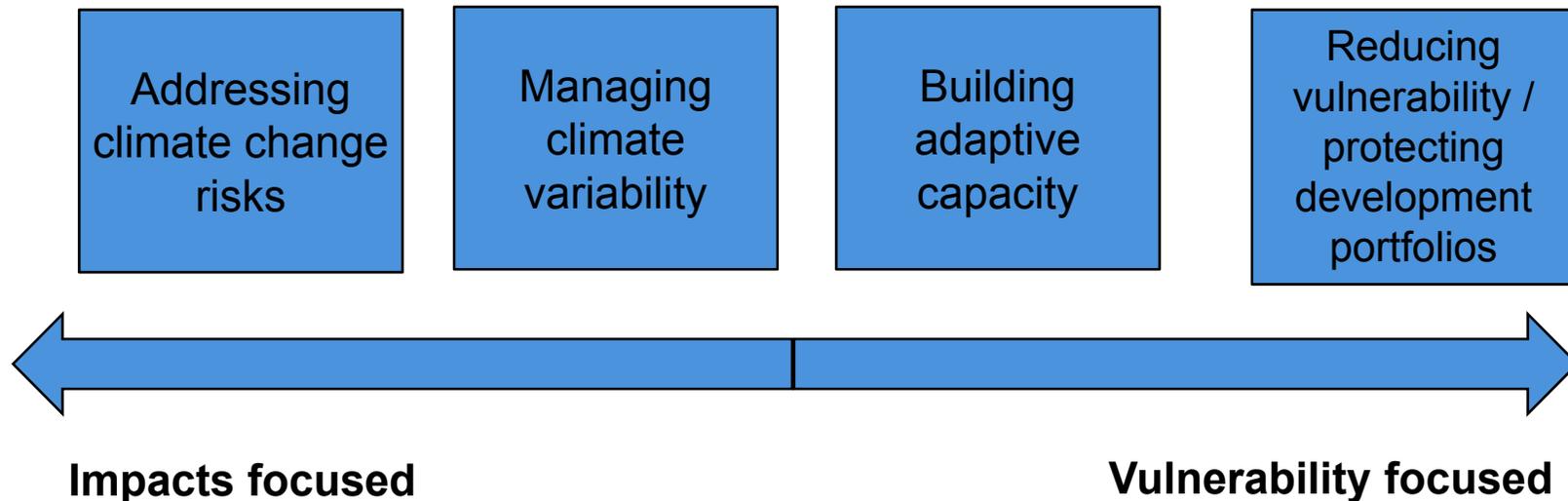


Definitions

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Adaptation Continuum

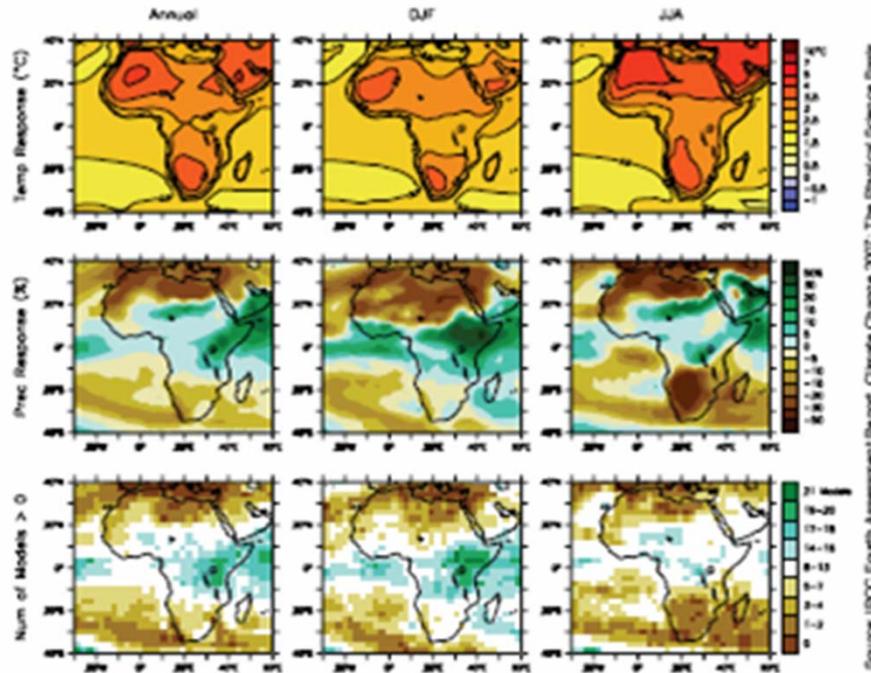


Addressing climate change impacts and risks

Understand the nature of climate change impacts and risks, where natural and human systems are likely to be most vulnerable. **Identify what adaptive responses may be needed** in the short-, medium- and long-term and what those responses could achieve.



Managing climate variability



An example of global climate modelling. Such large-scale data is used in 'downscaling' to provide finer resolution projections that are often more suited to use at the local level.

Focus on enhancing the collection and analysis of current and future climate information and thus, **improve climate forecasts.**



Building adaptive capacity

Enhance the ability of a system (social, ecological, economic, or an integrated system such as a region or community) **to minimise the effects or impacts of climate change or to maximise the benefits** from positive effects of climate change.



Reducing vulnerability/ protecting development portfolios

To have development initiatives attuned to social and economic needs, climate change and environmental sustainability.



Putting adaptation into the development context

Adaptation and development are intricately linked:

- a) In most practical cases, **adaptation to climate change is naturally embedded in a development fabric**, since all countries are addressing management of the main social, environmental and economic systems in one way or another towards sustainable development;

Example of development strategy from an Anglophone LDC

- Enhancement of agriculture yield and enhancement of livestock resources;
- Protection of forestry resources;
- Development of infrastructure and improvement of the transport system;
- Development of the energy sector.

What are the climate-related risks to the achievement of these development goals?



Putting adaptation into the development context

Adaptation and development are intricately linked:

- a) However, social, environmental and economic issues are **often addressed separately**, mainly as a result of separate sources of funding for the development of adaptation plans/strategies, and for the implementation of identified adaptation activities;
- b) Focusing on the beneficiaries of the adaptation or development, it becomes clear that **implementation of adaptation activities should be closely coordinated** and integrated with development efforts.

Source: McGray, H., Hammill, A. and Bradley, R., 2007, 'Weathering the Storm: Options for Framing Adaptation and Development', World Resources Institute, Washington, D.C.



How can the implementation of adaptation be coordinated with development at the national level?



Module 6: Mainstreaming adaptation into development

6.2. Integrating adaptation into development at multiple levels

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6.2. Integrating adaptation into development

6.3. National development processes (documentation)

6.4. Adaptation Goals (documentation)

Module 7: The NAP process

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CASE STUDIES + REGIONAL INPUTS

Learning points:

- Steps in integrating adaptation into national policies, plans and programmes;
- Screening policies, plans and programmes for climate change;
- Identifying entry points;
- Practical example and exercise.

Guiding questions:

- What are the key areas/functions of development into which integrating adaptation would be most important?
- What experiences exist with mainstreaming of adaptation?



Six steps for integrating adaptation into development planning

1. Understanding how the **current climate is relevant to policies**, plans or programmes at the national, sectoral, regional or agency level, and how such **policies, plans or programmes are sensitive to current climate**;
2. Using readily available resources to **assess** social, economic and environmental **impacts of climate change**;
3. Identifying and assessing the **likelihood and consequences** of specific **climate-related risks**;
4. Identifying **opportunities to address climate-related risk** within existing management practices, or by adjusting affected policies and programmes;
5. Implementing specific **measures to integrate adaptation** into the policies, plans or programmes;
6. Identifying and **managing challenges and opportunities**.



Identifying national development policies, plans and programmes

- National vision (e.g. vision 2020);
- National development and economic growth strategies or plans;
- Medium- and long-term national development goals (such as millennium development goals);
- National policies, strategies and plans on key vulnerable sectors (such as agriculture, water, coastal zones, or health) and on cross-cutting issues such as climate change, including sector-wide approaches;
- National poverty reduction strategy papers (PRSPs);
- National policies on governance and community councils;
- Other policies relevant to data and information collection and management, disaster preparedness and risk reduction;
- Multilateral agencies' strategies and action plans (World Bank Country Assistance Strategy, UNDAF, etc);
- Bilateral cooperation activities and strategies.



Integrating adaptation at various stages of the national policy cycle

Policy formulation stage

- Clear recognition of climate risks and the need for adaptation within relevant policies;
- Applying a climate lens in the formulation of the policy and strategy;

Planning stage

- Applying a climate lens to proposed sectoral plans;
- Proactive action on programmes or projects specifically aimed at enabling adaptation to climate change;

Resource allocation

- Reallocating funding to more vulnerable sectors or regions;
- Funding for adaptation specific plans or activities;

Implementation

- Translation of national-level priorities and budgetary allocations into sectoral and local government-level plans and budgets.

Source: OECD, 2009. Integrating Climate Change Adaptation into Development Co-operation. Policy Guidance. OECD, Paris.



Identifying and engaging key stakeholders

- Consider that stakeholders would differ depending on the scale and the type of the adaptation activities – i.e. based on key threats etc...;
- Establish partnerships with relevant government agencies and other stakeholders (community organizations, NGOs, advocacy groups, etc);
- Identify and engage the Ministry, agency or organization under which the majority of overall responsibility and coordination of the respective activity lies.



Examples of stakeholders at different levels of planning

National level

- National government – Parliament, President/Prime Minister's office
- Government ministries and departments
- Specialized Government Agencies and Committees
- Academic and research institutions
- Civil society organisations, associations and NGOs operating at national level
- International organizations operating at national level
- Donor agencies

Local/regional level

- Local governments
- Local communities (e.g. disaster risk reduction/management community)
- Civil society organizations and NGOs operating at local level
- Businesses
- Households
- Opinion leaders
- Educators

Sectoral level

- Government ministries or departments relevant to the sector being addressed
- Private sector
- Civil society organizations, associations and NGOs with interest on the sector

Project level

- Project implementation team
- Experts relevant to the project (project managers, economists, livelihood specialists)
- Specific communities or regions which are vulnerable
- Households
- Opinion leaders
- Educators



Enabling frameworks for integrating adaptation into development

- Climate change law/act;
- Environment law/act;
- Regulations governing coordination of institutions;
- Laws on sustainable use or protection of natural resources.



Example of Mali: Climate proofing at the project level

- **Partenaires:** GIZ, Programme d'Appui au Développement Durable de l'Élevage au Sahel Occidental (PADESO) & Ministère de l'Environnement et de l'Assainissement du Mali
- **Objectif:** Analyse détaillée des risques climatiques, options d'adaptation et intégration à la conception du projet
- **Etude Pilot en 2009:**
 - a) Analyse de l'incidence des effets de CC sur le projet
 - b) Développement des options d'adaptation
 - c) Hiérarchisation des options d'adaptation
 - d) Intégration des résultats à la conception du projet
- **2009:** Manuel d'utilisation du Climate Proofing dans les projets et programmes du Gestion Durable des Terres au Mali
- **2010:** Intégration du Climate Proofing dans la planification décentralisé



Climate Proofing of PADESO project in Mali: selected results

Unité d'exposition	Effets biophysiques	Effets socioéconomiques	Lien avec le projet	Probabilité des impacts	Options d'adaptation
Périmètres pastoraux de Nara	<p>Baisse de la production de la biomasse</p> <ul style="list-style-type: none"> Dégradation des ressources naturelles (biodiversité, sols) : Raréfaction des surfaces utilisables. Diminution de la capacité de charge/ des effectifs admissibles. Diminution de la production animale. Pression élevée sur les périmètres pastoraux. 	<ul style="list-style-type: none"> Perte des revenus (individus et sociétés coopératives). Conflits d'utilisation des périmètres pastoraux. 	Direct : L'atteinte des objectifs du projet partiellement compromise	Elevée	<ul style="list-style-type: none"> Respect des capacités de charge. Introduction d'espèces animales et végétales adaptées aux conditions du milieu. fourragers (ombrage, pâturage aérien) Création des AGR (embouche, vente des produits d'élevage ou aviaire) Adaptation des capacité de stockage.
		<ul style="list-style-type: none"> Allongement des chemins de la transhumance. Conflits pour des ressources rares. Exode des populations (urbanisation). Transformation des activités agro-pastorales vers l'élevage (et l'agriculture irriguée). 	Indirect : Effets sur l'ensemble du projet	Elevée	



Climate Proofing of PADESO project in Mali: Experience et Leçons

- Methode bien applicable, simple, facile à utiliser, très pratique et participatif
- Aide à aborder et structurer le complexe thème des CC
- Montre les besoins d'adapter les techniques d'adaptation
- Nécessaire à impliquer différents acteurs : Société civile (experts sur le terrain) et experts climatiques
- dans un projet en cours, il est difficile d'intégrer de nouvelles options d'adaptation qui n'ont pas été prévues au moment du montage du projet ou planifications annuelles
- **Good starting point for awareness raising**
- **Further information: <http://www2.gtz.de/dokumente/bib-2011/giz2011-0223fr-climate-proofing.pdf>**



Corner Game: Challenges for Mainstreaming CCA

Context

- Mainstreaming climate change adaptation into development is confronted with various challenges

Instructions

- Each corner of the room represents one of the following main challenges
 - i. Political/ institutional
 - ii. Financial/ economic
 - iii. Social/ stakeholder involvement
 - iv. Technical solutions
- Select a corner which represents the challenge you find most relevant. In a moderated group discussion you might defend your arguments.



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6.3. Understanding national development processes, frameworks and models

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CASE STUDIES + REGIONAL INPUTS

Learning points:

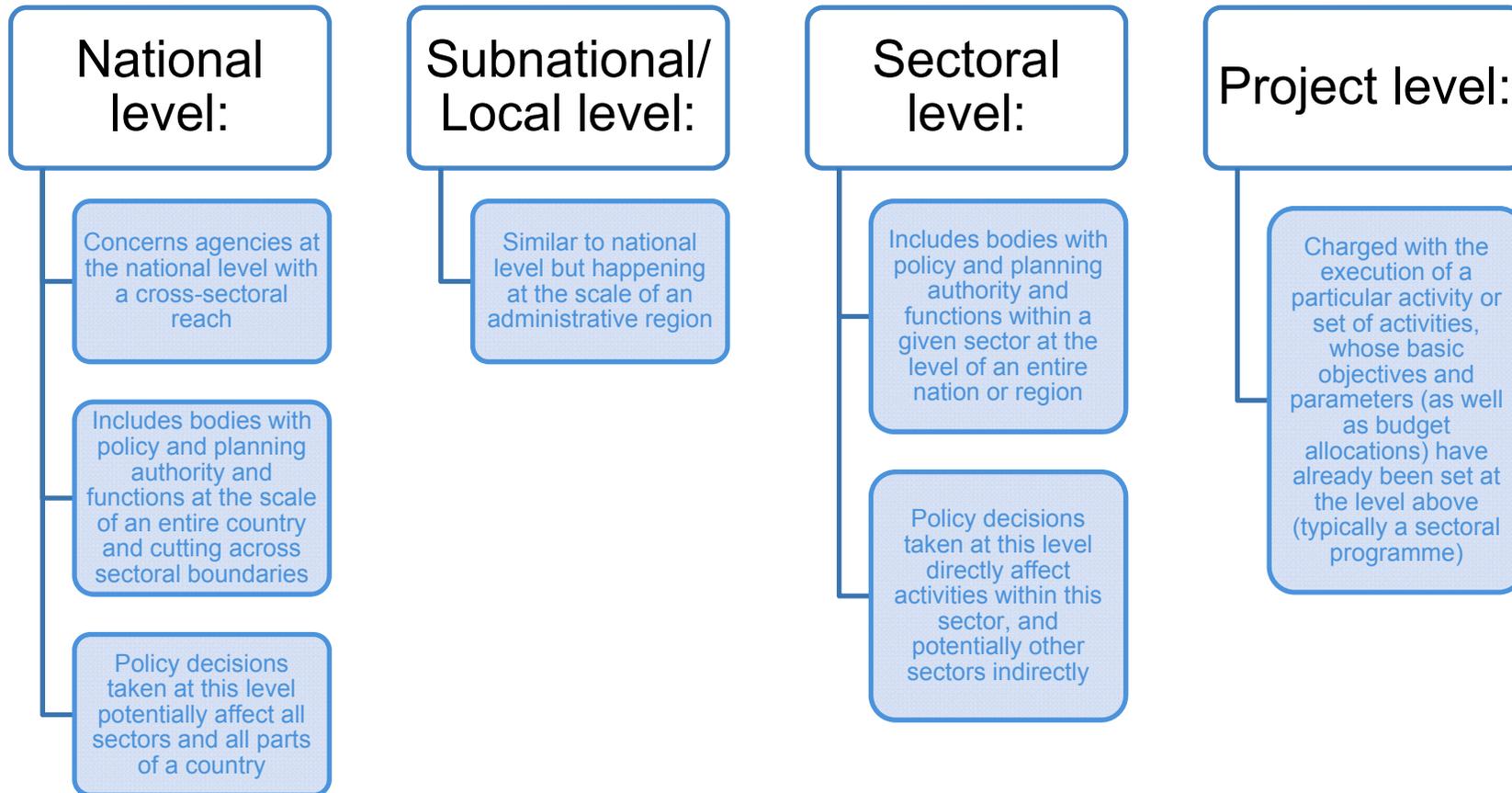
- Projected changes in the climate for the African region;
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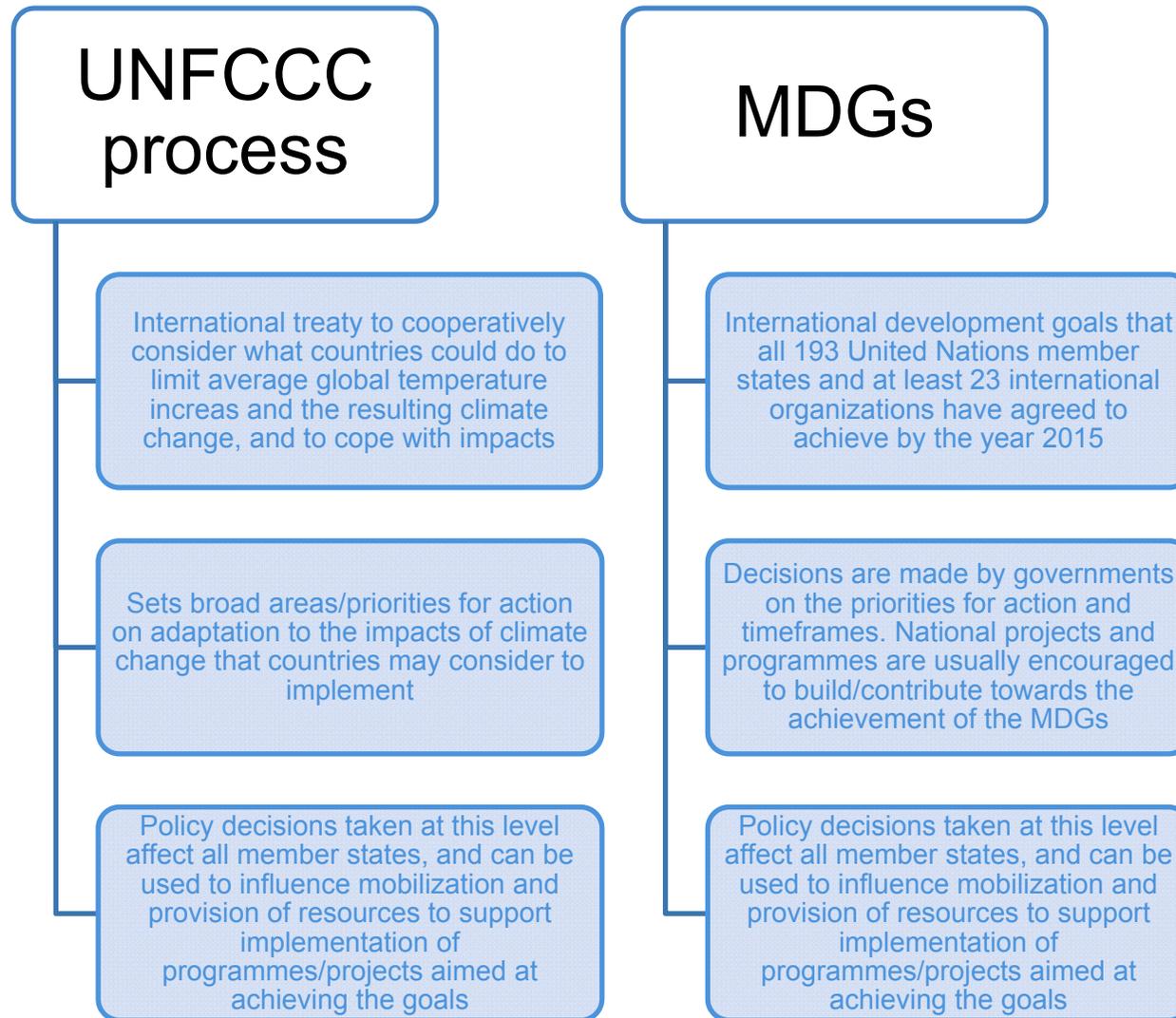
Understanding decision making levels in development planning



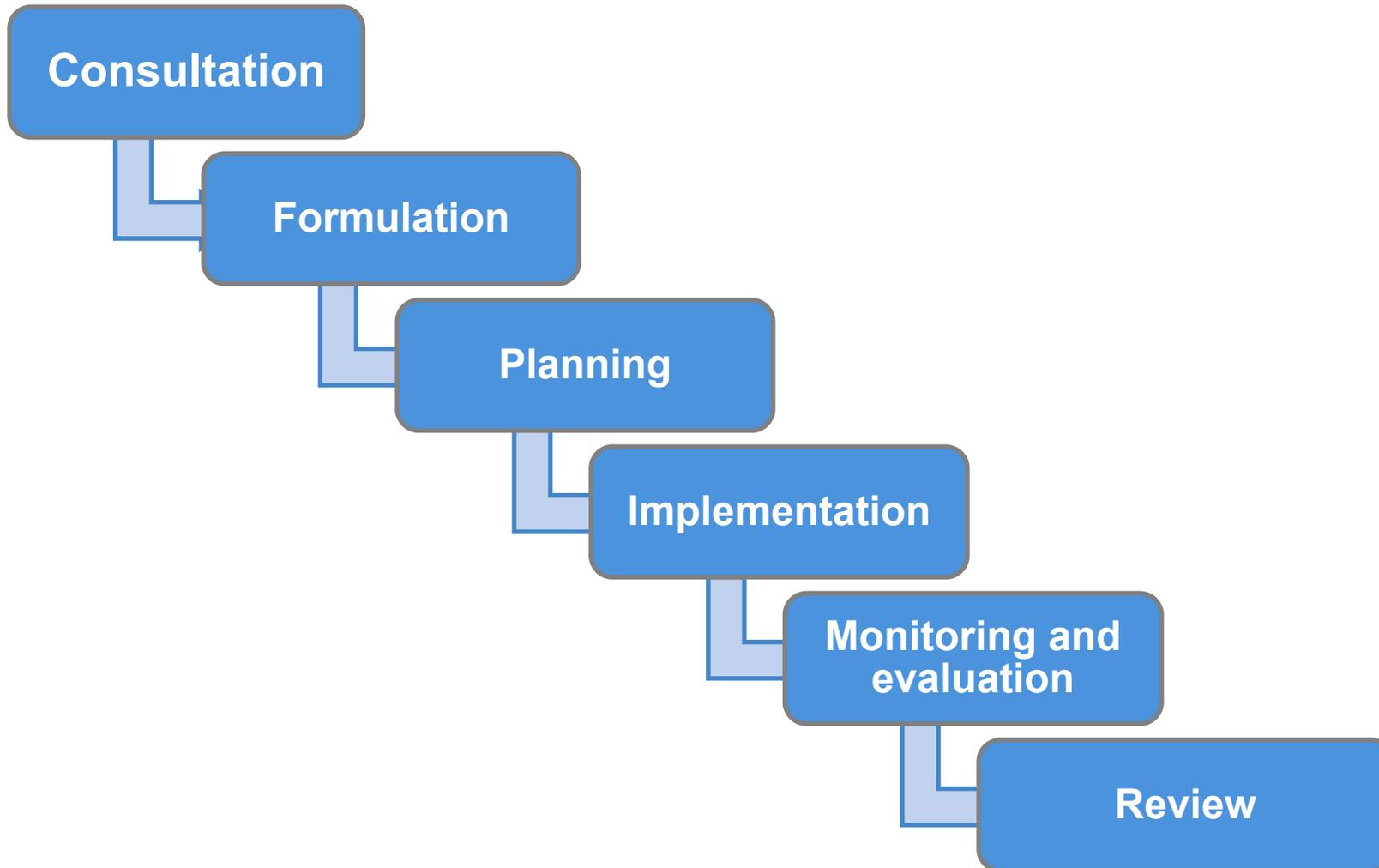
Source: OECD, 2009. Integrating Climate Change Adaptation into Development Co-operation. Policy Guidance. OECD, Paris.



Understanding decision making levels in development planning (cont.)



National policy cycle



Elements of national planning models

Economy Income and consumption patterns;

Capital and investment flows;

Society Population, Gender;

Education, health;

Income distribution;

Labour force and productivity;

Environment Natural resource stocks - depletion, conservation;

Pollution generation.



Basic criteria followed by national development models

Public ownership:

- Detail country's national development indicators;
- Demonstrate sharing of income between different income classes;
- Transparency - clarity and explicitness on the baselines and assumptions.

Stakeholder involvement:

- Promote participation of the public and civil society, including special groups;
- Promote coordinated participation of development partners.

Long-term vision:

- Long-term vision to guide overall national development;
- Continuity.

Balance between structural/social and macroeconomic/financial concerns:

- Representation of social, economic and environmental dimensions;
- Policy making guidance for cross-sector linkages.



Timeframes of national policy plans/frameworks

Long-term plans/frameworks:

- National vision;
- Long-term development plans;

Medium-term plans/frameworks:

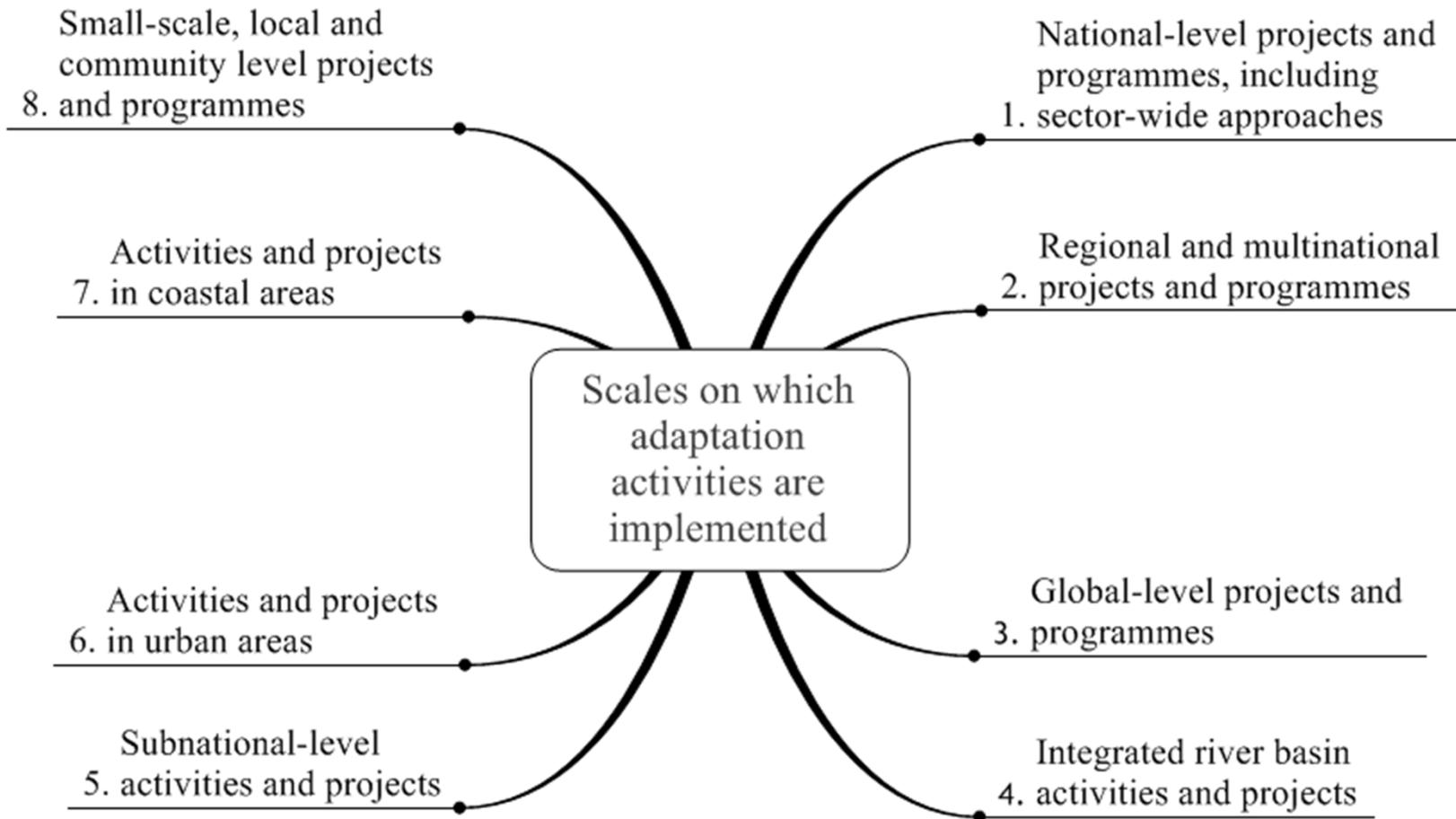
- Millennium development goals;

Short-term plans/frameworks:

- Five year national economic/development plans.



Matching scales at which adaptation activities are implemented



What are the components of regular development planning that can be used in the adaptation planning process?

What would be the entry points?



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6.4. Adaptation goals

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- What are suitable measures to climate-proof development and increase adaptive capacity?



Agriculture and food security, including fisheries

Goal

To achieve and safeguard food security

Example adaptation actions include:

- Change of planting dates;
- Diversification of crop production by breeding resilient crops (drought resilient for drought, salt resistant for coastal zones, etc.);
- Subsidies for fertilisers, seeds and/or guaranteed prices for farmers;
- Fodder production, reseeded of rangelands;
- Water saving irrigation techniques;
- Land use planning, soil conservation;
- Improvement of methods for food processing and preservation;
- Use of food/cereal banks;
- Diversification of sources of fish for canneries;
- Introducing fish concentration mechanisms.



Water resources

Goal

To achieve and safeguard water security and sanitation

Example adaptation actions include:

- Rain water harvesting;
- Rehabilitation of wetlands;
- Integrated watershed management with land use and coastal areas protection benefits;
- Rehabilitation of boreholes/wells;
- Resilient designs of reservoirs, irrigation canals, ponds and dykes;
- Water use efficiency;
- Eco-sanitation.



Early warning and disaster management – physical safety

Goal

Protection of life and property against climate extremes and disasters including along low lying and coastal areas

Example adaptation actions include:

- Artificial lowering of lakes
- Construction of dykes, current breakers, and shifting dune bars;
- Radar reflectors and life vests for fishermen;
- Hazard/risk maps and related response maps, escape routes;
- Planning settlements in low risk areas;
- Resettlement of communities at risk;
- Rehabilitation of existing and/or installing new observing systems;
- Establishment of communication systems for early warning.



Terrestrial and coastal ecosystems

Goal

Protection and enhancement of ecosystem structure and function for the sustainable provision of ecosystem goods and services.

Example adaptation actions include:

- Coastal afforestation, rehabilitation and management;
- Participative protection of coastal sediment barriers;
- Optimization of freshwater and drainage management;
- Soil and vegetation management;
- Integrated watershed management;
- Reseeding of rangelands;
- Plantation of trees and grasses in gullies;
- Construction of gabions to stop erosion and rehabilitate wetlands;
- Rehabilitation of silted ponds and reconstitution of basin slopes.



Health

Goal

Support and enhancement of human health and safety.

Example adaptation actions include:

- Distribution of treated mosquito nets;
- Production of bio-pesticides;
- Rehabilitation and establishment of health care centres;
- Securing potable water;
- Waste water treatment systems.



Photo credit: peakhealth.com.au



Energy

Goal

Protection and expansion of renewable energy sources and supplies.

Example adaptation actions include:

- Wild fire prevention and management;
- Deploying energy efficiency;
- Investing in micro hydropower generation stations;
- Diversification of energy sources (solar, wind, biogas).



Social and economic development

Goal

Climate proofing major components of national economies and sustainable development (socio-economic growth engine).

Example adaptation actions include:

- Community training programmes on climate change;
- Inclusion of climate change into national curriculum;
- Creation and utilization of insurance systems for climate change;
- Allocation of contingency funding in droughts;
- Allocation of contingency funding for surviving during disasters;
- Safety nets (e.g. social action funds);
- Gender mainstreaming;
- Vocational training facilities and centres for communities.



Culture

Goal

Protection and preservation of cultural values and systems.

Example adaptation actions include:

- Protection and conservations of indigenous species;
- Preservation of cultural heritage sites and promotion of botanical gardens.

