CLIMATE CHANGE ADAPTATION

Knowledge Needs Survey Results

The demand for policy-based risk reduction is high, and the linkages between adaptation and national development planning are clearly perceived, according to a recent UNDP survey of adaptation knowledge needs. The capacity to develop a national adaptation policy is considered a greater challenge than finding the necessary funds. These findings will guide the content of the Adaptation Learning Mechanism (ALM), a project that will encourage sharing of adaptation experiences through an open knowledge platform.

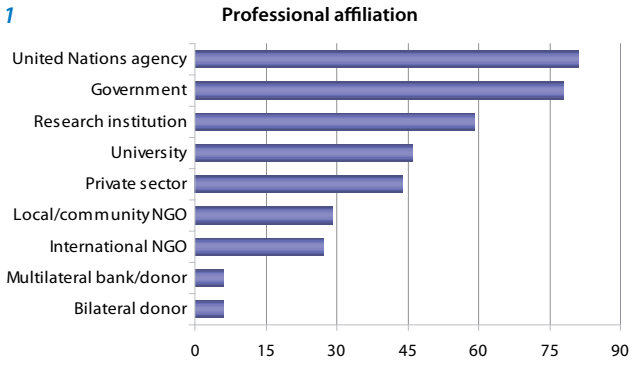
SURVEY SAMPLE

The needs assessment survey was circulated widely online to development and environment practitioners in English, Spanish, French and Russian. There were 376 responses over three months (17 August to 25 October 2007).

UN Agencies (81 respondents) and governments (78) comprised the largest professional categories of responses. Research institutions (59), the private sector (44), universities (46) and non-governmental organisaions (NGOs) (56) made up a further 55% of the sample.

See Figure 1 for the breakdown by profession.

Figure 1



PRIORITY INTERESTS

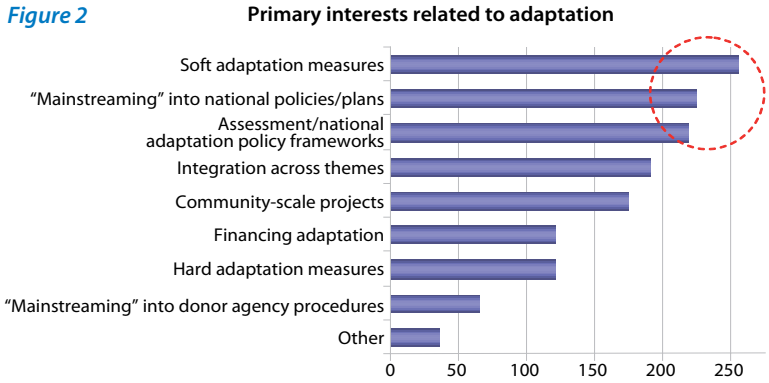
Demand for adaptation needs focused on policy approaches and planning. Soft adaptation measures (policies, plans, etc.), national-level integration of climate change risks into policies and plans, and adaptation assessment/national adaptation frameworks were the highest priorities for 68%, 60% and 58% of survey respondents, respectively. In particular, a majority of government respondents mentioned these three categories as their primary interests.

The next highest priority was integration of adaptation across themes, followed by community-scale projects. These were prioritised by 51% and 47% of respondents, respectively.

At the lower end, financing adaptation and hard adaptation measures were each prioritised by 32%, and donor agency mainstreaming by 18%.

Figure 2 shows the response distribution. Responses selected by more than 55% of respondents are indicated with a red circle.

Figure 2



PRIORITY ADAPTATION ISSUES

Respondents were asked to identify *What adaptation issues would you like to have more information about?*

This question was open-ended, without prompts or categories, and four blank lines were provided for answers. A total of 1,059 answers were provided by the 376 respondents.

A desire to learn more about policies, integration, and programmatic approaches to climate change adaptation was mentioned by 58% of respondents. Forty-six percent wanted to learn about the experiences of others in implementing adaptation. Assessing and preparing for risks, impacts, and disasters were mentioned by 39% of respondents, and 35% were interested in adaptation funding, costs and/or economics.

A few categories of issues emerged:

- Practices: 'how to adapt' in various situations (e.g., coastal risks or arid agriculture);
- Capacity-building at national and community levels;
- Management of common challenges (e.g., barriers, linking with national priorities);
- Gathering data, researching, and measuring adaptation;
- Examples of adaptation at national and community scales;
- Good practices, guidance and resources;
- Cross-cutting concepts (e.g., community involvement, gender issues, livelihoods);
- Technical challenges (e.g., uncertainty, methods); and
- Providing tools, education, and training for adaptation projects and programmes.

Table 1 presents the most common themes.

Table 1: **Common priority adaptation issues, by theme**

Themes	% response
Policy, mainstreaming/integration and programmes	**58%**
Implementation of measures, projects	**46%**
Measures	22%
Projects	18%
Government role	**45%**
Government and sectors	24%
National scale	17%
Cities and municipalities	10%
Economics, costs and funding	**35%**
Economics and costs	16%
Funding/financing	12%
Assessment	**16%**
Communities	**10%**
Disaster	**8%**

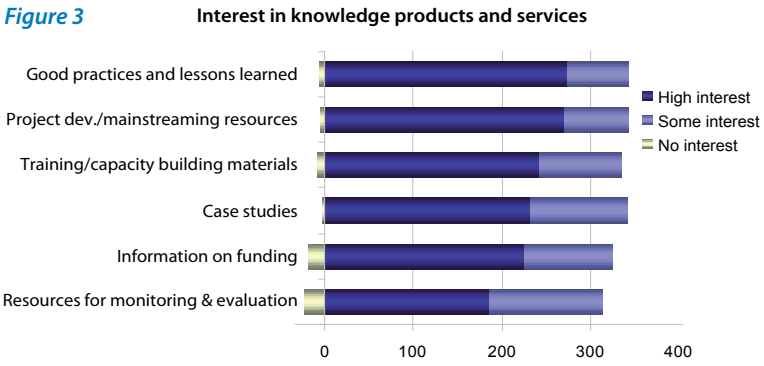
SELECTED RESPONSES TO PRIORITY ADAPTATION ISSUES

- Concrete measures that have been successfully used in developed countries for adaptation;
- Case studies on national adaptation strategies and action plans, with integrated risk reduction measures across thematic areas;
- Monitoring and evaluation guidelines for projects in livelihoods, governance, etc.;
- Relationship between the financial costs of adaptation and short- and long-term benefits;
- Engaging private sector finance for community-based adaptation projects;
- Barriers that may be anticipated when implementing an adaptation project;
- Best practices for national frameworks and institutional arrangements for adaptation;
- Engaging carbon finance for adaptation via voluntary carbon market projects;
- Including adaptation in environmental impact assessments, building codes and other regulatory instruments;
- Examples of policy and legislative support for adaptation at transboundary, national, provincial, and local levels;
- Ensuring that adaptation across different sectors is complementary and not conflicting;
- Hard adaptation measures for coastal defense;
- Linking climate change risks and adaptation responses to other hazards in coastal areas;
- Tools for cost-benefit analysis of adaptation;
- Effectively measuring a change in adaptive capacity, and moving beyond 'change at the margins';
- The experiences of other countries in linking adaptation with national planning objectives and national circumstances;
- Scaling up from community-based adaptation research to government policies/programmes;
- Financing for adaptation programmes;
- More and better translation of scientific findings so non-scientists can work with the information.

KNOWLEDGE PRODUCTS AND SERVICES

Fifty-five percent of respondents or more indicated high interest in each knowledge product or service listed. More than 70% of respondents selected 'high interest' in good practices and lessons learned products (78%), resources to support project development and/or mainstreaming (77%), and training or capacity development materials (71%). The category of least interest was resources for monitoring and evaluation (55%). Only three respondents indicated no interest in case studies. See Figure 3 for the breakdown.

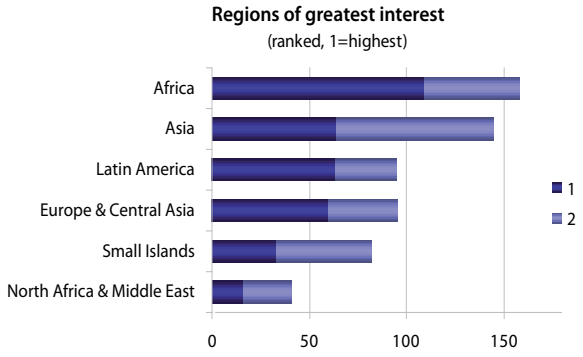
Figure 3



REGIONS OF GREATEST INTEREST

Africa was the region of highest interest overall among respondents (including 32% of 1st place rankings). Asia followed with 19% of 1st place rankings and 30% of 2nd place rankings. Latin America and Europe & Central Asia received nearly equal rankings after Africa and Asia, while North Africa & the Middle East received the fewest priority rankings. Australasia, the Mediterranean, and regions in South Asia were also mentioned. See Figure 4 for the breakdown.

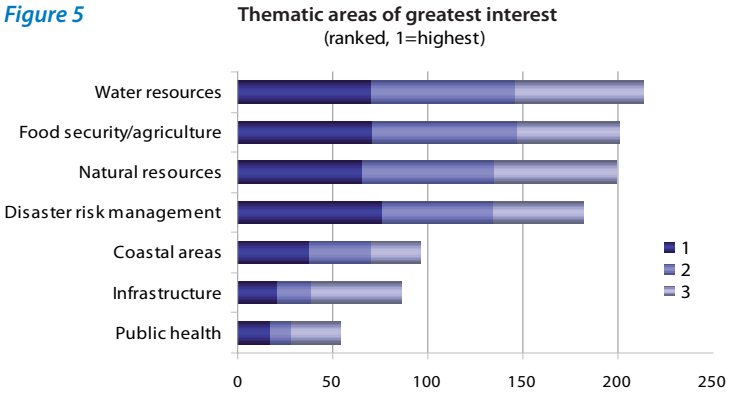
Figure 4



THEMES OF GREATEST INTEREST

Water resources emerged as the thematic area of greatest interest, taking all priority rankings into consideration, with four categories: water resources, food security/agriculture, natural resources, and disaster risk management receiving comparably high ratings – and all ranking significantly higher than coastal areas, infrastructure and public health, which were prioritised (with a 1st ranking) by 22%, 12% and 10% of respondents, respectively. However, natural resources can be seen as somewhat of a catch-all category, including water, land resources, and coastal areas within its potential scope. See Figure 5 for the breakdown.

Figure 5



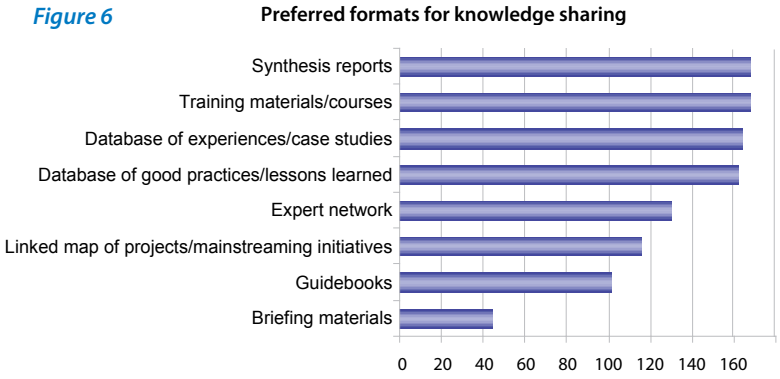
PREFERRED KNOWLEDGE-SHARING FORMATS

Four formats for knowledge sharing emerged with the highest rankings: synthesis reports, training materials/courses, a database of experiences/case studies and a database of good practices/lessons learned.

The four lowest-ranked categories for knowledge sharing were briefing materials, guidebooks, a linked map of projects/mainstreaming initiatives, and an expert network.

See Figure 6 for the breakdown.

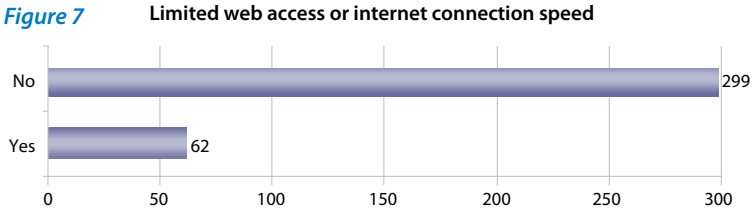
Figure 6



WEB ACCESS, INTERNET CONNECTION SPEED

Eighty-three percent of respondents indicated that their web access or internet connection speed was not limited, but 17% of respondents indicated a limitation. Among those with limited internet access or low connection speeds, hard copies of publications, CDs, DVDs and email were suggested formats for sharing adaptation knowledge products and services. As the survey was conducted online, this may have influenced the likelihood that respondents do not have limited web access. See Figure 7 for the breakdown.

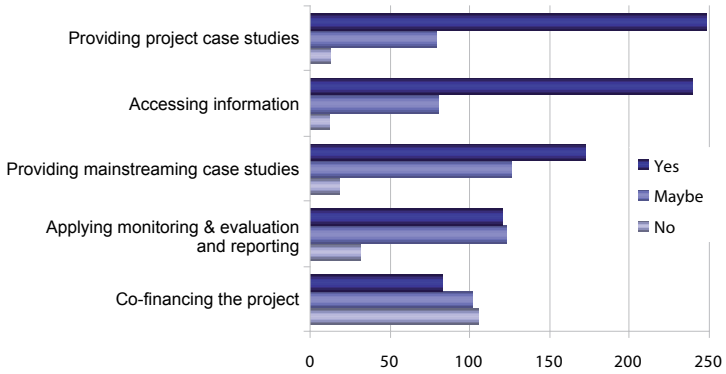
Figure 7



CONTRIBUTIONS TO THE KNOWLEDGE BASE

Nearly three-quarters of survey respondents indicated they would be likely to contribute project case studies (73%), while 72% said they would access information available through the knowledge base. Only four percent of respondents indicated they would not be likely to contribute to the project in these ways. Fifty-four percent of respondents indicated they would be likely to contribute mainstreaming case studies, and approximately 45% of respondents selected "yes" for their likelihood of applying and reporting on adaptation initiatives using monitoring and evaluation (M&E) guidelines. Twenty-nine percent indicated they would be likely to co-finance the ALM initiative in some way, with 36% responding "no" to this possibility. See Figure 8 for the breakdown.

Figure 8 **Likely contributions to/use of knowledge base**



SUMMARY OF RESULTS BY THREE MAIN USER GROUPS

1. GOVERNMENT

Governments had the same top interests as Development Agencies, but prioritised them differently. Key adaptation interests:

- Soft adaptation measures (selected by 76% of respondents)
- National level mainstreaming (67%)
- Assessment/adaptation frameworks (59%)

The preferred formats for knowledge sharing among this group of respondents were:

- Access to a database of good practices (selected by 49% of respondents)
- Training and capacity building materials (47%)
- Synthesis materials (43%)

Governments also selected the same top interests as development agencies, but prioritised them differently. Preferred climate change adaptation knowledge 'products or services':

- Good practices/lessons learned (74%)
- Resources for the development/design of projects and/or mainstreaming initiatives (72%)
- Capacity building resources (68%)

For a more detailed breakdown, see Annex I.

Almost two-thirds of government responses indicated 'high' interest in information on funding (62%) and case studies (62%). Governments had the lowest level of interest in M&E resources (57%).

2. DEVELOPMENT AGENCIES

This group comprises the GEF Agencies, UN agencies, bilateral and multilateral banks, and/or donors. They prioritised the following categories as their key adaptation interests:

- National level mainstreaming (selected by 67% of respondents)
- Soft adaptation measures (59%)
- Assessment/adaptation frameworks (55%)

The preferred formats for knowledge sharing among this group of respondents were:

- Training and capacity building materials (selected by 55% of respondents)
- Access to a database of good practices (45%)
- Expert network (43%)
- Linked map of projects/mainstreaming initiatives (43%)

GEF Agencies ranked the following as their preferred climate change adaptation knowledge 'products or services':

- Resources for the development/design of projects and/or mainstreaming initiatives (82%)
- Good practices/lessons learned (80%)
- Capacity building resources (73%)

For a more detailed breakdown, see Annex II.

Information on funding (69%), case studies (59%), and resources for M&E (57%) each received more than one-half of 'high' interest rankings from Development Agency respondents.

3. NGOs

NGOs (both international and local) included community-scale adaptation in their top priorities. Soft adaptation measures – a top-ranking interest among development agencies and governments – held the least level of interest for NGOs. Key adaptation interests:

- National-level mainstreaming (selected by 60% of respondents)
- Community-scale adaptation (58%)
- Assessment/adaptation frameworks (55%)

The preferred formats for knowledge sharing focused approximately equally on three categories:

- Training and capacity building materials (selected by 50% of respondents)
- Synthesis material (48%)
- Access to a database of case studies (48%)

Unlike governments and development agencies, NGOs did not include capacity building among their top three preferences for adaptation knowledge 'products or services'. They were the only group to include information on available financial resources for adaptation as a high interest. Preferred climate change adaptation knowledge 'products/services':

- Resources for the development/design of projects and/or mainstreaming initiatives (70%)
- Information on funding availability/eligibility (70%)
- Good practices/lessons learned (70%)

For a more detailed breakdown, see Annex III.

Table 2: **Ranking and percentage of responses, by main user group**

	Development agencies [1]		Governments		NGOs	
Key adaptation interests						
National level mainstreaming	1	67%	2	67%	1	60%
Soft adaptation measures	2	59	1	76	4	48
Assessment and adaptation frameworks	3	55	3	59	3	55
Community-scale adaptation	4	45	4	44	2	58
Preferred formats for knowledge sharing						
Training & capacity building materials	1	55%	2	47%	1	50%
Good practices database	2	45	1	49	4	38
Synthesis material	4	39	3	43	2	48
Case studies database	5	35	4	38	2	48
Expert network	3	43	6	28	3	43
Mapped initiatives	3	43	6	28	6	25
Guidebooks	6	22	5	36	5	30
Preferred knowledge 'products/services'						
Good practices/lessons learned	2	80%	1	74%	1	70%
Project/mainstreaming resources	1	82	2	72	1	70
Capacity building resources	3	73	3	68	2	65
Information on funding availability/eligibility	4	69	4	62	1	70
Case studies	5	59	4	62	3	63
M&E resources	6	57	5	57	4	55

Notes:

1 Development agencies includes UN agencies, bilateral donors and multilateral donors and banks.

ANNEX I. GOVERNMENT RESPONSES

Figure 1

Key adaptation interests

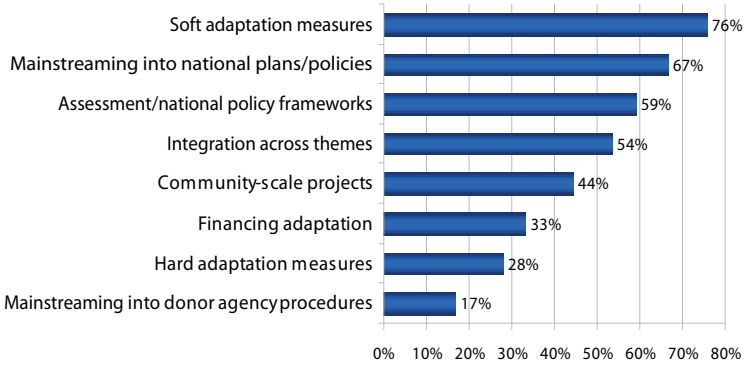


Figure 2

Knowledge products/services of high interest

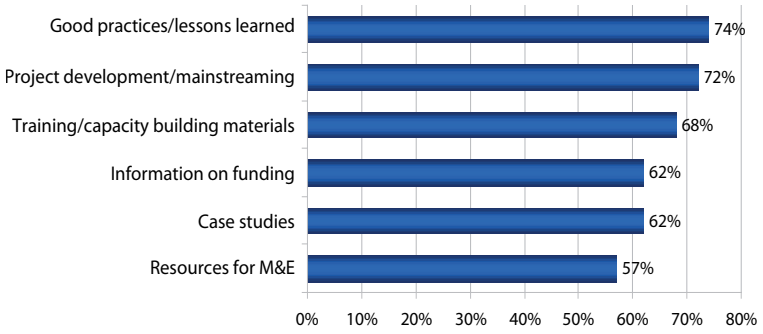


Figure 3

Preferred formats for knowledge sharing

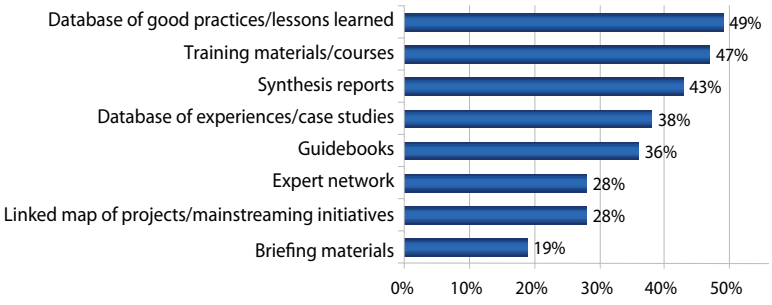
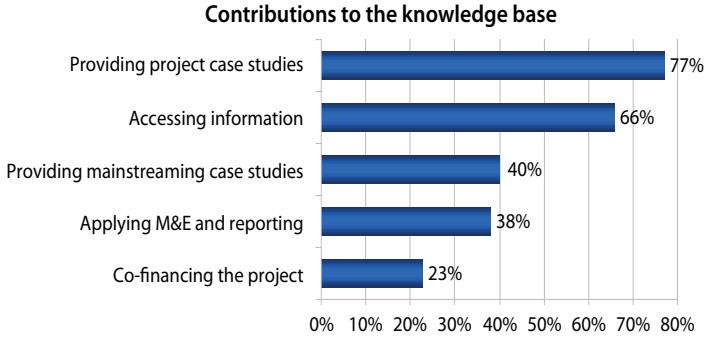


Figure 4



ANNEX II. DEVELOPMENT AGENCY RESPONSES

(UN Agencies, Banks, Multilateral and Bilateral agencies)

Figure 5

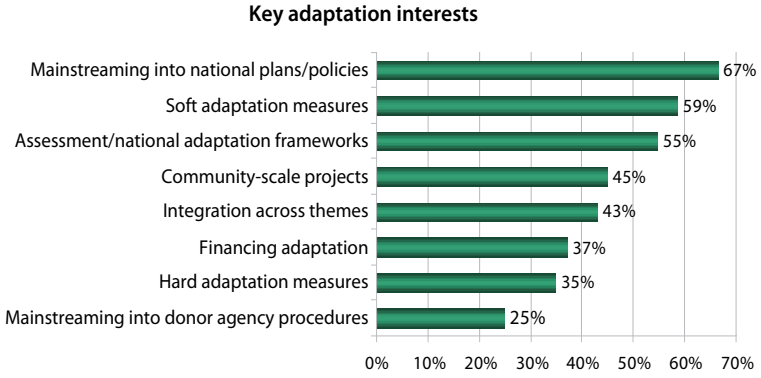


Figure 6

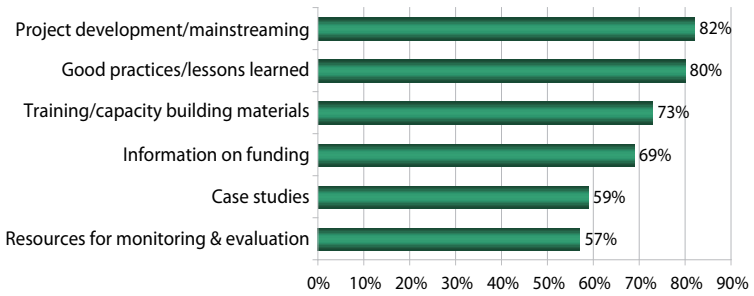


Figure 7

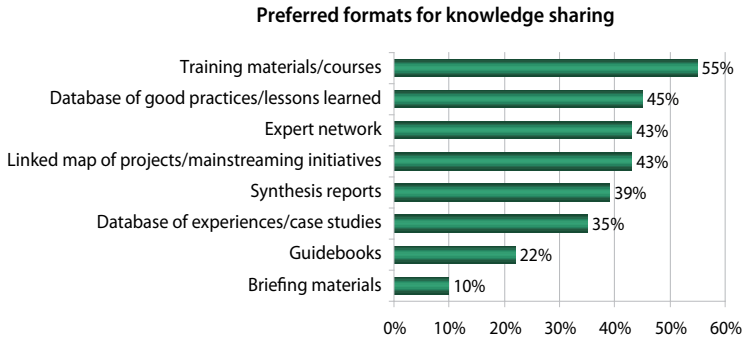
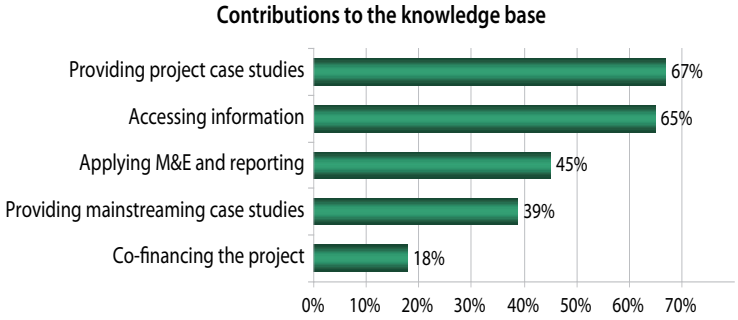


Figure 8



ANNEX III. NGO RESPONSES
(International & Local)

Figure 9

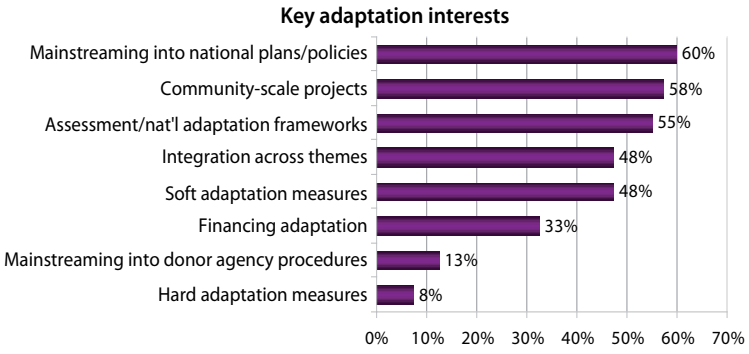


Figure 10

Knowledge products/services of high interest

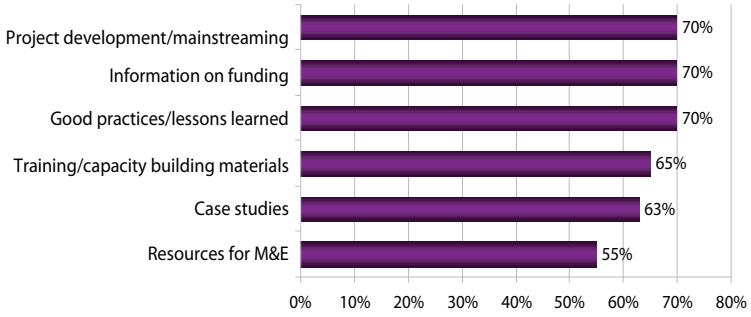


Figure 11

Preferred formats for knowledge sharing

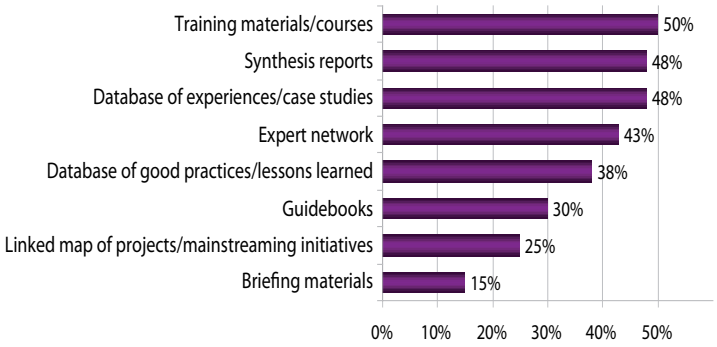
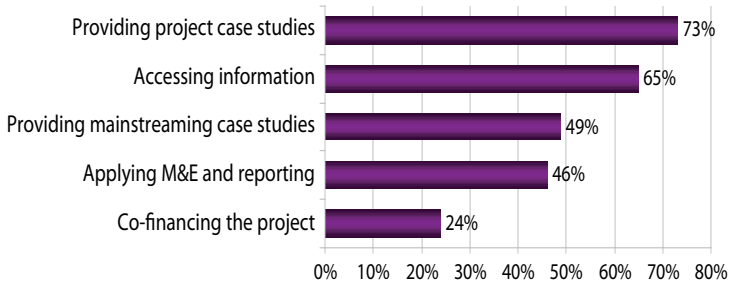


Figure 12

Contributions to the knowledge base



ANNEX IV. SELECTED SURVEY RESPONSES: ADAPTATION ISSUES OF INTEREST

Selected English responses to *What adaptation issues would you like more information about?*

Measures

- Hard adaptation measures for coastal defense
- Ecosystem management for adaptation
- Community relocation as adaptation
- Health hazards, new infections and infestations, and adaptation adjustments

Technical

- Linking climate change risks and adaptation responses to other hazards in coastal areas
- Tools for cost-benefit analysis of adaptation measures
- Using scenarios as planning tools

Case studies

- Concrete adaptation measures that have been successfully used in developed countries
- Case studies on national adaptation strategies and action plans with integrated risk reduction measures across themes
- Experiences of other countries linking adaptation with national planning objectives and circumstances

M&E

- Monitoring and evaluation guidelines for projects in livelihoods, governance, etc.
- Effectively measuring a change in adaptive capacity, moving beyond 'change at the margins'

Costs and benefits

- Relationship between the financial costs of adaptation and the short and long term benefits

Financing

- Engaging private sector finance for community-based adaptation projects
- Engaging carbon finance for adaptation via voluntary carbon market projects
- Financing sources for adaptation programmes and projects

Policy

- Including adaptation in EIA, building codes and other regulatory instruments
- Examples of policy and legislative support for adaptation at transboundary, national, provincial and local levels

Challenges

- Scaling up community-based adaptation research to government policies and programmes
- Barriers that may be anticipated when attempting to implement an adaptation project
- Ensuring that adaptation across different sectors is complementary not conflicting
- More and better translation of scientific findings so non-scientists can work with them
- Sharing learning with equivalent government agencies overseas

Good practices

- Best practices for national frameworks and institutional arrangements for adaptation
- Good practices in adaptation risk assessments and policy responses

ANNEX V. SURVEY: KNOWLEDGE NEEDS FOR CLIMATE CHANGE ADAPTATION

1. Introduction

UNDP is launching the Adaptation Learning Mechanism (ALM) project in 2007, a project that will establish a knowledge and learning platform for adaptation to climate change.

The ALM is co-funded by the GEF and implemented by UNDP in collaboration with UNEP and the World Bank.

The project objective is to accelerate learning from experience in integrating climate change risks into development.

The intended users of the ALM include the GEF agencies, developing countries, and other adaptation stakeholders. Your input is vital to helping us tailor the services and products of the project.

Please take a moment to respond to the following questions. It should not take more than 10 minutes. Some responses are required.

Your collaboration on this project is greatly appreciated. At the end of the survey, you can submit your e-mail address to receive further information.

2. Knowledge needs

1. What is your current professional affiliation?

- ☐ Local/community NGO
- ☐ International NGO
- ☐ Research institution
- ☐ Bilateral donor
- ☐ University
- ☐ Government
- ☐ Multilateral bank/donor
- ☐ United Nations agency
- ☐ Private sector

Other (please specify)

_____
_____
_____

2. In a sentence, how does adaptation to climate change relate to your work?

_____
_____
_____
_____
_____

3. What are your primary interests related to climate change adaptation? (select up to 4)

- ☐ Hard adaptation measures (physical investments, adjustments)
- ☐ Soft adaptation measures (policy, planning, information)
- ☐ Community-scale projects
- ☐ 'Mainstreaming' climate change risks into donor agency procedures
- ☐ 'Mainstreaming' climate change risks into national plans/policies/programmes
- ☐ Integration of climate change risks across themes (e.g. health, disaster, etc.)
- ☐ Financing adaptation
- ☐ Assessment of climate change risks and adaptation responses, or establishment of national adaptation frameworks

Other (please specify)

_____
_____
_____

4. What adaptation issues would you like to have more information about?

1. _____
_____

2. _____
_____

3. _____
_____

4. _____
_____

3. Topics of interest

5. Please rate your interest in the following adaptation "knowledge products/services"

	High interest	Some interest	No interest
Resources for project development/mainstreaming (e.g. tools, guidelines)			
Case studies			
Good practices and lessons learned			
Resources for monitoring and evaluation (M&E)			
Information on adaptation funding availability and eligibility			
Training and capacity building materials			

Other (please specify)

_____

_____

_____

6. Please select up to two regions of greatest interest to you (1 = highest). (Optional)

	1	2
Africa		
Asia		
Latin America		
Europe and Central Asia		
North Africa & Middle East		
Islands		

Other (please specify)

_____

_____

_____

7. Please select up to three themes of greatest interest to you (1 = highest). (Optional)

	1	2	3
Disaster risk management			
Public health			
Food security/agriculture			
Water resources			
Coastal areas			
Natural resources			
Infrastructure			

Other (please specify)

_____

_____

_____

8. What formats for knowledge sharing would you most like to use? (Select up to 3, not ranked)

	X	X	X
Database of experiences/ case studies			
Database of good practices/lessons learned			
Synthesis reports (e.g. experiences with regional issues, good practices by theme)			
Training materials/courses			
Briefing materials			
Guidebooks			
Linked map of adaptation projects or mainstreaming initiatives			
Expert network			

Other (please specify)

_____

_____

_____

4. Contributions to the ALM

10. Would you consider contributing to the knowledge base or using the ALM in the following ways?

	Yes	Maybe	No
Contribution of project case studies/experiences			
Contribution of main-streaming case studies/ex-periences			
Application of M&E and reporting of results			
Accessing information - use of reports, case studies			
Co-financing the project - through in-kind initiatives or contributions			

Other (please specify)

_____

_____

_____

THANK YOU

Thank you for your valuable input to the needs assessment for climate change adaptation knowledge. Your thoughts will be instrumental for the design of the ALM.

If you would like to receive the results from this survey, please submit your e-mail address to Jennifer Frankel-Reed at jennifer.frankel-reed@undp.org with 'ALM SURVEY' in the subject line.