

## Screening Climate Risks to Development Cooperation

In a changing climate development programmes must manage climate risks and opportunities to ensure aid effectiveness. IDS and its partners are developing a climate risk screening and management approach to meet this challenge. This methodology, called ORCHID (Opportunities and Risks of Climate Change and Disasters), helps development organisations and their partners to integrate risk reduction and adaptation processes into their programmes.

Climate change risks threaten to derail national and international efforts to enhance economic growth and reduce poverty if proactive action is not taken. These risks include:

- **Direct threats:** e.g. damages from extreme weather to infrastructure built by a project
- **Indirect threats:** e.g. climate impacts on health impacting a non-health sector project
- **Underperformance of investments:** e.g. agricultural projects that fail when rainfall decreases.

### Climate risk management

ORCHID (Opportunities and Risks of Climate Change and Disasters) is a systematic climate risk management methodology which assesses the relevance of climate change and disaster risks to an organisation's portfolio of development projects. This screening process has been piloted in DFID country offices. Climate risk assessment differs from the regular practice of screening for environmental impacts as it focuses on how environmental impacts affect a project's goals and objectives.

ORCHID acknowledges that:

- Climate risks may not be the most

important constraint on poverty reduction and so climate considerations need to be embedded in a process that considers all risks

- The basis for adapting to the future climate lies in improving the ability to cope with existing climate variations. Climate change projections inform this process to ensure that current coping strategies are not inconsistent with future climate change
- Adaptation processes draw on approaches to disaster risk reduction, as well as tackling gradual changes and new hazards
- Risk management allows examination of how development processes can contribute to reducing vulnerability to climate change.

### Portfolio screening

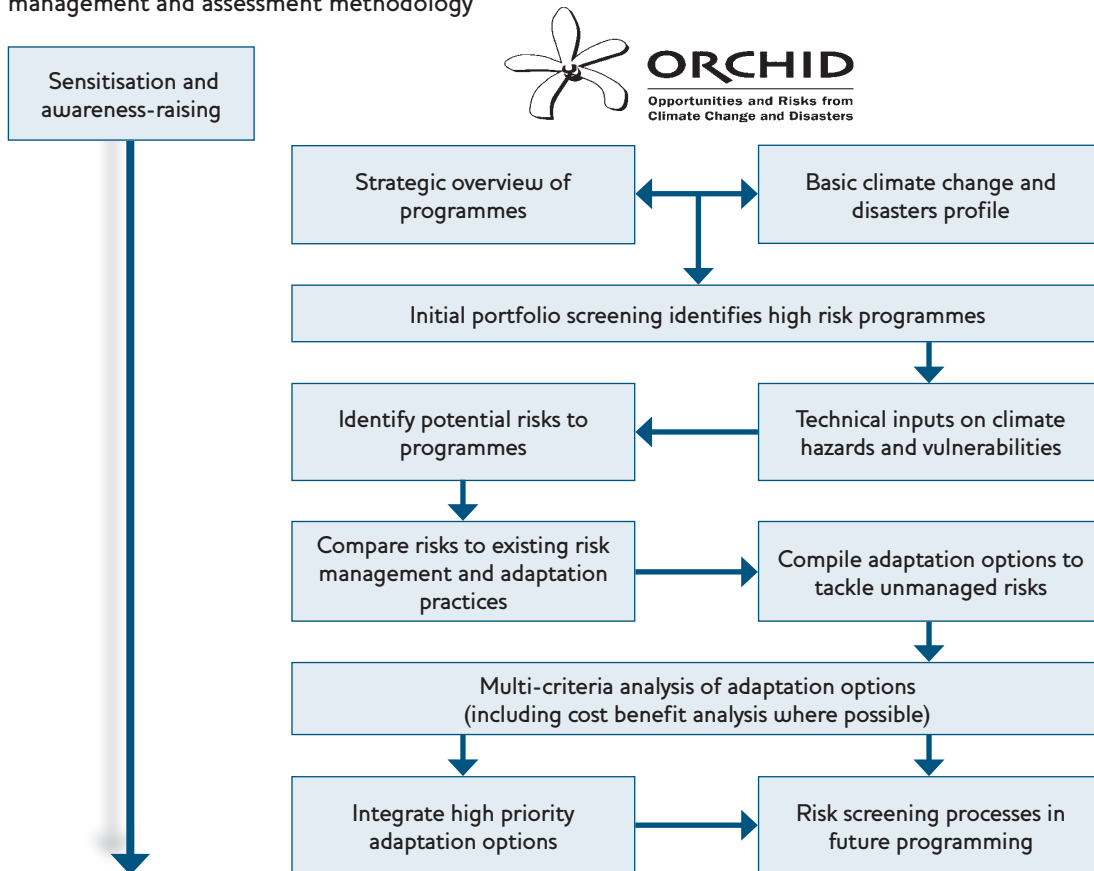
Figure 1 (overleaf) illustrates the different stages of the screening methodology, emphasising its role in raising awareness and conceptualising adaptation as a learning process. While it will not be feasible to reduce all climate risks, this process allows for their more systematic consideration in the context of development programmes.

Based on an initial profile of current and future climate impacts, the process identifies those programmes in regions and sectors that may be at risk from climate impacts, or that present good opportunities for improving adaptive capacity. Drawing on further technical inputs on hazards, impacts and vulnerability, potential risks to programme activities are identified, which are then assessed against existing risk management practices. A range of adaptation options are then identified for tackling unmanaged risks and exploiting opportunities for strengthening adaptive capacity.

A multi-criteria analysis is undertaken involving programme stakeholders, ideally including beneficiaries, to determine high priority adaptation options that can be integrated into the programme objectives and activities. This analysis uses criteria developed by stakeholders, including coherence with national policy, flexibility across a range of possible future climate impacts, and cost effectiveness, which is informed where feasible by an economic cost benefit analysis. The process as a whole also helps identify generic strategic lessons for programming and how to incorporate climate risk management into regular programme development.

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Figure 1: The ORCHID (Opportunities and Risks from Climate Change and Disasters) climate risk management and assessment methodology



## Further Reading

Thomas Tanner et al (2007) *ORCHID: Piloting Climate Risk Screening in DFID Bangladesh*, Research Report, Brighton: IDS

Thomas Tanner et al (eds) (2007) *Climate Risk Screening in DFID India*, Research Report, Brighton: IDS

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## Lessons from early experiences

During the piloting of the ORCHID process in DFID Bangladesh and DFID India a wide range of potential adaptation measures were identified. Structural measures included improving the resilience of rural infrastructure by raising homesteads in flood-prone areas above the 20 year flood line and using rainwater harvesting techniques at schools. Non-structural measures included the development of vulnerability reduction mechanisms for climate-sensitive livelihood sectors during the preparation of local development plans and improving cross-agency coordination in disaster response. Knowledge generation and sharing remain crucially important means of supporting the adaptation process.

Recommended actions included vulnerability assessment and mapping, analysis of drainage timings and patterns during extreme events and incorporating climate change and disasters issues into education programmes.

The process highlighted the limitations of climate change data to project changes over project-

relevant timescales. Adaptation responses are therefore based on existing climate variability, linking with disaster risk reduction while building greater flexibility to cope with a wider range of variation in the future. The ORCHID methodology provides full analysis at strategic or sectoral level of the implications of climate change for poverty reduction programmes and this can be built into future work.

However, the key strength of the ORCHID approach has been in stimulating greater awareness of the linkages between climate variability and climate change with different aspects of poverty reduction programmes. These linkages include improving coherence with national climate change policy on adaptation and its relationship to the international United Nations Framework Convention on Climate Change (UNFCCC). Piloting the process has provided a means of systematic self-assessment and reflection, and an opportunity to highlight current gaps in knowledge and experience.