
Climate change:

Implications for SME Enterprise and Skills development policies and strategies, particularly in developing countries

Background

Climate change

Over the past 100 years, global mean temperatures have increased by 0.7°C, and the 1990s was the warmest decade for the past 150 years, with some of the hottest years ever recorded. Today there is a mass of evidence and a very broad consensus that this process is due to human activity, and principally the emission of greenhouse gases. Furthermore, it is predicated that if this warming persists, it will influence water availability, agricultural productivity and biodiversity, and lead to a growing number of extreme weather events such as hurricanes, forest fires and floods.

The recent report by former World Bank economist Sir Nicholas Stern for the UK government predicted that extreme weather could cut global GDP by up to 1%. A 2-3°C rise in temperatures could reduce global economic output by 3%, increasing to 10% if temperatures rise by 5°C. In the worst case scenario, global consumption per head would fall by 20%. These figures are in line with estimates from the United Nations Intergovernmental Panel on Climate Change (IPCC). Few scientists have been able to put a monetary value on the cost of climate change, but Cambridge University's model predicted damage amounting to €74 trillion if governments pursue 'business as usual' over the next two centuries.

A recent pioneering study by the European Trade Union Confederation (ETUC), of the impacts of climate change on employment in Europe analyzed measures made to combat climate change and their impact on employment. It specifically analyses the implications in different sectors of the economy: energy generation, transport, iron and steel, cement, housing and construction, which alone account for over 80% of greenhouse gas emissions. In summary the study concluded that ... "even ambitious targets for reductions in emissions could translate into net gains for employment. However, it should be noted, that major transformations, creating numerous winners as well as losers are expected. Some sectors are likely to see mostly increases in employment, including construction (particularly from renovation), equipment manufacturing, energy savings and efficiency. In other sectors such as transport and energy, very significant restructuring is likely, with many workers having to change occupations. In some energy intensive sectors, like iron and steel, mitigation measures precipitate the ongoing relocation to emerging economies. "

Today it is widely recognised that sustainable development, which balances economic development, social development, and environmental protection are prerequisites for - and not obstacles to - sustainable economic growth. The impact of global warming will fall hardest on populations already living in conditions of extreme vulnerability, and whose already inadequate and precarious livelihoods will be put at further risk as climates become more extreme. Furthermore, they have the least ability, in terms of know-how and financial resources, to adjust their livelihoods in response to environmental protection and damage mitigation policies. Rural populations— especially in Africa – are in most need of innovative strategies to maintain and improve productivity and employment opportunities in the face of this challenge.

Impact on SMEs, skills development and employment

Micro, Small and Medium Enterprises (SMEs)¹ play a significant role in virtually every economy and represent a large segment of the private sector. In low-income countries with GNP per capita between \$100 and \$500, SMEs account for over 60 percent of GDP and 70 percent of total employment and in middle-income countries they produce close to 70 percent of GDP and 95 percent of total employment.²

SMEs already face a number of market and institutional disadvantages due to their size including disproportionately high fixed costs of accessing markets and information, credit constraints, insufficient firm capacity, and difficulties in dedicating resources to research, development and training that could lead to innovations and potentially rapid growth.

Climate change will add new challenges for these enterprises. In many countries, increased short-term variability (in rainfall, for example) and/or long-term trends (such as rising sea levels) are damaging the ecosystems on which these enterprises depend. Policies, strategies, institutions and technologies will be needed that enhance the adaptive capacities of owners and workers in such enterprise to adapt to the changes brought about by climate change.

These changes will in turn induce changes in the types of agricultural products, the techniques for their production and the ways in which they are processed and marketed. Adapting to these changes, and indeed utilizing them for the objective of improving sustainable livelihoods and local rural economy development will require acquisition of new technical and entrepreneurship skills – to adapt to new products or to new technologies. This will, in turn, accentuate the necessity of developing cost-effective ways to deliver skills development opportunities in rural areas, to make sure that young people and women have access to

Objectives and outputs

Objectives

This consultancy will address the implications for a skills development and SME development policies and programmes. Specifically the objectives of the assignment are to:

- 1)** Contribute analyses of policies and programmes to build the capacity of rural communities to adapt to climate change and adopt new technologies to improve productivity and decent work, which will inform the preparation of the General Discussion Reports for the International Labour Conference, 2008, on:
 - Rural Employment and Poverty Reduction

¹ There is a lack of consensus on the definition and scale of SMEs. The major multilateral institutions have loosely agreed on a definition encompassing all businesses with less than 250 employees in the formal and informal economies (medium-sized less than 250, small-sized less than 50 and micro less than 10 employees)

² Data on SMEs is more readily available in developed economies. This is not only due to greater budgets and sophistication of data collection and analysis in developed economies—where volumes of data are created, collected, and analyzed by both public and private sectors—but it also reflects the fact that in developing economies a much larger percentage of SME activity falls in the informal sector, where data is often difficult or impossible to obtain, necessitating the use of averages or approximations.

- Skills for Productivity, Employment Growth and Development.
- 2) Inform ILO staff involved in SME and skills development on some of the major trends in responding to climate change, and
- Assist the ILO staff involved in SME and skills development to reflect on and begin planning for strategies about the implications for their work and the overall strategy Job Creation and Enterprise Development Department.

Outputs

The outputs for this assignment are as follows:

- 1) A Briefing Note (20-30 pages- in support of Objective 1, above)
- Draws on the existing body of evidence and summaries some of the likely impact of climate change on livelihoods and employment, particular focus on least developed countries and rural communities identifying both at-risk employment and new enterprise/employment opportunities, with what is known about probable timelines of impact.
 - Articulates the implications for what skills and enterprise development support will be needed to capitalize on the potential of new technologies, crops, processing to expand productive and sustainable livelihood (e.g. agricultural and industrial skills training for the introduction, expansion, improvement processing and export of crops enabling to increase their job-creating capacity, efficiency and quality)
 - Articulates the implications for the need for new re-skilling, as part of broader policy interventions, for those whose livelihoods are lost or no longer sustainable in order to ease transition into new kinds of agricultural and rural employment
 - Identify and explain examples of positive, or potentially positive, policies, programmes, independent initiatives to deliver training and support to rural communities to enable them to adopt new sustainable technologies that can be effective in responding to the emerging challenges of climate change (e.g. setting-up or strengthening support agencies such as agricultural extension centers, exporters' associations, standards setting agencies in agriculture, dialogue mechanisms and coordinated programme implementation between provincial and national policy agencies, local economic initiatives and their linkages to national policy), summarizing what is known about their impact and their factors underlying their potential success.
 - Highlight in particular examples of the efforts of Employers' and Workers' associations in these local efforts and conducive national policies, as well as awareness-building research and campaigns.
2. A mapping of what other what other international development agencies concerned with Skills and SME development are doing or planning to do in this area of work.
3. A Staff Development full-day workshop for ILO staff involved in SME development and skills development on the major challenges and trends in responding to climate change with respect to sustainable and productive enterprise and employment. Prior

to the workshop the consultant will be required to provide background information and presentation materials that can be distributed to potential participants and interested ILO field staff. Through the workshop, it is anticipated some of the key concerns for the ILO on SME and skills development and climate change will start to be articulated. It is expected that this will inform future work on the SME and skills development components of a broader ILO programme of work on the employment impact of climate change.

4. A final report that can be published as a joint Working Paper by EMP/ENTERPRISE and SKILLS.

Payments Schedule of work

Payments	Work to be completed	Target date
First payment	Upon delivery of Briefing Note	12 September 2007
Second payment	After submission of mapping of work of other international enterprise development agencies	??
Final payment	After delivery of (a) staff development workshop and (b) submission of the final report, expected to be published as joint Working Paper by EMP/ENTERPRISE and SKILLS	10 December 2007