

Enabling Global Partnerships for Sustainable Development: A Science-Policy Interfaces to Support Climate Resilient and Low Carbon Development

Miola, Apollonia; Senior Scientist, European Commission Joint research Centre; and Neher, Frank; Scientist, European Commission Joint research Centre, Italy, apollonia.miola@jrc.ec.europa.eu

Many initiatives are in place to support climate resilient and low carbon development in coherence with the new global agendas that have been framed by the Sustainable Development Goals. This paper presents an index designed to support the European Union Global Climate Change Alliance Plus (GCCA+) in its efforts to help the most vulnerable countries mitigate and adaptation to the worst impacts of climate change. This GCCA+ index is an open source index accessible via a web platform that serves as science-policy interface organizing indicators, methods and data to reconcile climate change challenges with development objectives by incorporating the principles of sustainable development.

The GCCA+ index is a “fit for purpose” index that addresses the GCCA+’s policy objective of boosting the efficiency of response to the needs of vulnerable countries and groups. It covers the social, economic and environmental aspects of achieving climate-resilient development by aggregating 34 country-level ‘fit-for-purpose indicators’, which have been identified on the basis of both their relevance within the scope of the GCCA+ programme, and compliance with the following criteria: reliability, open source, consistency, scientific robustness, global coverage.

The selected indicators have been classified along one of the four components characterised as follows: Natural hazards (the occurrence of climate-related and weather-driven hazards, flooding, storms, droughts, and sea-level rise); Exposure (the consequences for people and assets of the occurrence of such events); Vulnerability (the socioeconomic and environmental factors that are likely to influence vulnerability. It includes indicators on sensitivity, which can be considered as the dependence on sectors sensitive to natural resources such as agriculture); Capacity (Adaptive capacity: encompassing the features that determine the ability to adapt of a local community including ecosystem services; Coping capacity: capturing the ability of a country to cope with disasters in terms of formal, organised activities; Mitigation capacity, which refers to the factors that ease implementation of actions reducing greenhouse gases).

The GCCA+ index can be consulted at on line a web knowledge platform (<http://knowsdgs.jrc.ec.europa.eu>) that acts as interface between science and policy and provides transparent, reliable, accurate, and open source information on the indicators, data and methodology applied to build the index. It allows users to examine the factors behind the index and the indicators to design their knowledge base for climate resilient and low carbon development. The main objective of this platform is to support the development of strategies that contribute meeting both climate and poverty alleviation objectives, thereby reducing the risk of conflict between solution. Such efforts should create win-win opportunities, by ensuring that current and future climate risks are

systematically integrated into development strategies designed to foster economic growth, poverty reduction and other development objectives.