

Chapter 4

Research Methods and Tools

ABSTRACT

This chapter details the research methods for assessing climate change adaptation among farm families. The methods cover two types of procedures: benchmarking and evaluation. The authors define benchmarking as the documentation, measurement and analysis of current adaptation practice in any given target group, organization or community for purposes of comparison, internal or external, to a given standard, de facto or otherwise. Benchmarking is not done within the bounds of project parameters (i.e., time and resources) and project-determined outcomes. On the other hand, evaluation refers to baseline, mid-term, final and ex-post measurements of adaptation practice vis a vis given interventions. Evaluation is conducted within set project parameters and project-determined outcomes.

INTRODUCTION

Our constructs on climate change adaptation enumerated in the previous chapter lead us to two applied research methods, benchmarking and evaluation (Flor & Flor, 2016).

Benchmarking

The main method for analyzing climate change responsiveness or CCRp is benchmarking. Benchmarking refers to the documentation and analysis of responsiveness, in general, or climate change adaptation, in particular, of

DOI: 10.4018/978-1-5225-2767-1.ch004

any given target group, organization or community for purposes of future comparison, internal or external, not within the bounds of project parameters (I.e., time, resources) and project-determined outcomes.

Benchmarking provides the current state of climate change responsiveness (including adaptation) of a subject or target group. Since climate change has a spatial dimension, subjects or target groups would have a geographic or locational attribute. Hence, subjects of the benchmarking procedure would be: communities (e.g., towns, villages etc.); groups living within certain geographical boundaries; or organizations. Benchmarking would be most applicable to groups highly vulnerable to climate change.

The benchmarking procedure is exploratory. It is not based on assumptions about the group, organization or community being studied. It does not test hypotheses nor establishes correlations but is descriptive in nature. However, it makes use of probing questions allowing respondents to volunteer information themselves.

Mixed Methods Design

The use of Mixed Methods Research Design in the conduct of climate change responsiveness benchmarking is recommended. Mixed methods design is neo-positivist in nature since its conclusions are based on the analysis of empirical data that has been specified in a conceptual framework.

Integrated mixed methods involve both quantitative and qualitative strands. The QUAN strands in benchmarking refer to: the sampling tool that identifies respondents; a one-shot survey that generates the climate change responsiveness (CCRp) profile; the measurement of ΔKAP ; and the resultant ratings in the CCRp Scorecard. The QUAL strands are composed of: focus group discussions (FGD); and key informant interviews (KII).

The QUAN and QUAL strands are fully integrated since individual strands or methods are dependent upon or will supplement one another. The items solicited in the one-shot survey will depend on the responses from the FGD. Consequently, the questions asked in the KII will depend on the answers in the one-shot survey and the CCRp Profile generated. Finally, the CCRp scorecard can only be accomplished after the key informant interviews.

14 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/research-methods-and-tools/191156

Related Content

Urban Sprawl Monitoring Using Remote Sensing and GIS Techniques of the City Jaipur, India

Pushpendra Singh Sisodia, Vivekananda Tiwari and Anil Kumar Dahiya (2019).

Environmental Information Systems: Concepts, Methodologies, Tools, and Applications (pp. 1444-1456).

www.irma-international.org/chapter/urban-sprawl-monitoring-using-remote-sensing-and-gis-techniques-of-the-city-jaipur-india/213002

Impact Assessment of Textile Industries of Rajasthan Using Geo-Spatial Techniques

Arpana Chaudhary, Chetna Soni and Chilka Sharma (2020). *Impact of Textile Dyes on Public Health and the Environment* (pp. 70-89).

www.irma-international.org/chapter/impact-assessment-of-textile-industries-of-rajasthan-using-geo-spatial-techniques/240898

Semiconductor Nanocomposites-Based Photoelectrochemical Aptamer Sensors for Pharmaceuticals Detection

Kevin Otieno Okoth, Ruth Nduta Wanjau and Maurice Otieno Odago (2020). *Effects of Emerging Chemical Contaminants on Water Resources and Environmental Health* (pp. 109-132).

www.irma-international.org/chapter/semiconductor-nanocomposites-based-photoelectrochemical-aptamer-sensors-for-pharmaceuticals-detection/248378

Fluoride Contaminated Groundwater

(2020). *Nano-Phytoremediation Technologies for Groundwater Contaminates: Emerging Research and Opportunities* (pp. 31-54).

www.irma-international.org/chapter/fluoride-contaminated-groundwater/241167

Signal Processing Techniques in Smart Grids

Zahoor Uddin, Nadir Shah, Ayaz Ahmad, Waqar Mehmood and Farooq Alam (2017).

Renewable and Alternative Energy: Concepts, Methodologies, Tools, and Applications (pp. 1278-1302).

www.irma-international.org/chapter/signal-processing-techniques-in-smart-grids/169635