



## Review

# Transforming river basins: Post-livelihood transition agricultural landscapes and implications for natural resource governance



K.G. Sreeja<sup>\*</sup>, C.G. Madhusoodhanan, T.I. Eldho

Department of Civil Engineering, Indian Institute of Technology Bombay, Powai, Mumbai, Maharashtra 400076, India

## ARTICLE INFO

## Article history:

Received 26 September 2014

Received in revised form

16 April 2015

Accepted 17 May 2015

Available online 27 May 2015

## Keywords:

Livelihoods

Diversification

Agricultural landscape

Natural resources

River basin management

Governance

## ABSTRACT

The agricultural and livelihood transitions post globalization are redefining resource relations and redrawing landscapes in the Global South and have major implications for nascent natural resource governance regimes such as Integrated River Basin Management (IRBM). A mosaic of divergent reciprocations in resource relations were noticed due to livelihood transitions in the rural areas where previous resource uses and relations had been primarily within agriculture. The reconstitution of rural spaces and the attendant changes in the resource equations are observed to be creating new sites of conformity, contestation and conflicts that often move beyond local spaces. This paper critically reviews studies across the Global South to explore the nature and extent of changes in resource relations and agricultural landscapes post livelihood diversification and the implication and challenges of these changes for natural resource governance. Though there is drastic reduction in agricultural livelihoods throughout the Global South, changes in agricultural area are found to be inconsistent and heterogeneous in the region. Agriculture continues in the countryside but in widely differentiated capacities and redefined value systems. The transformed agrarian spaces are characterized by a mosaic of scenarios from persistence and sustainable subsistence to differentiation and exploitative commercial practices to abandonment and speculation. The reconfigured resource relations, emergent multiple and multi-scalar interest groups, institutional and policy changes and altered power differentials in these diversified landscapes are yet to be incorporated into natural resource governance frameworks such as IRBM.

© 2015 Elsevier Ltd. All rights reserved.

## 1. Introduction

The major agricultural regions of the world, especially in the Global South are experiencing drastic realignments to livelihoods that feature on-farm diversifications, off-farm occupations, multiple occupational commitments and seasonal, circular or permanent migrations for livelihood security (Bryceson, 2009; Ellis and Freeman, 2004; Reardon, 2001; Rigg, 2006). These livelihood transitions embody complex and multiple influences that range from physical constraints such as resource closures and climate change to altered personal and societal aspirations to state interventions and national and international policy climates (Rigg, 2005). The shifts from agriculture as the livelihood mainstay are accompanied by extensive and reciprocal changes in natural resource relations, redrawing of the rural agricultural landscape and diverse emergent conflicts and struggles over resources and

ownership (Aide and Grau, 2004; Barbier, 2000; Chen et al., 2014; Chi et al., 2013). New forms of inequality and social differentiation are also part of such transformations (Batterbury, 2010). These reciprocal interactions of livelihoods and agrarian landscape have received scant focused attention in livelihoods literature to date (King, 2011).

The diversified and modified agricultural landscape is of particular significance to sustainable Natural Resource Management (NRM) institutions and policies even though it has not critically informed Natural Resource (NR) governance discussions until now. The current resource governance regimes and nascent institutional mechanisms for NR governance such as Integrated River Basin Management (IRBM) therefore need to be examined in the changing context of these new livelihood landscapes and management spaces created in its wake (Kay, 2008; King, 2011; Woods, 2007). In river basins as management units, the dynamic relationship between rural landscapes and livelihood activities is of particular importance. It is also remarked that understanding the socio-economic motivations and multi-scale interactions governing the dominant land-use changes, especially in the tropical South, is

<sup>\*</sup> Corresponding author.

E-mail addresses: [kg.sreeja@gmail.com](mailto:kg.sreeja@gmail.com) (K.G. Sreeja), [madhucg@gmail.com](mailto:madhucg@gmail.com) (C.G. Madhusoodhanan), [eldho@civil.iitb.ac.in](mailto:eldho@civil.iitb.ac.in) (T.I. Eldho).

highly significant for coming to terms with global warming and its impacts (Wohl et al., 2012). In the context of these pervasive changes to agricultural livelihoods, landscapes and their significance to sustainable resource governance and resilience in the various agro-ecological settings of the South, certain questions demand critical appraisal.

1. How has livelihood shifts and diversification affected resource relations, links and agricultural landscapes in the Global South?
2. Has livelihood oriented rural development research and policy post globalization made a difference to visualization of NRM spaces such as river basins?
3. What are the implications of these reconstituted landscapes for NR governance and policy especially in the context of river basin based NRM?

These questions are answered through a critical and comprehensive review of academic and policy literature on livelihoods and river basin management studies across the Global South. The region under consideration, 'the Global South' includes all those countries previously designated as 'developing countries' since the 1970s. It includes the countries of Asia, Africa, Latin America and the Caribbean. A complete list is provided in UNDP (2004). Studies were selected from published literature available through electronic database, workshop proceedings, reports and book chapters on livelihoods and river basin management following the methodology for systematic review suggested by the Campbell collaboration guidelines (Hammerström et al., 2010). Evidence is consolidated and interpreted from macroeconomic analyses and empirical micro-level case studies on rural occupational diversification using diverse disciplinary and methodological frameworks, both quantitative and qualitative, to capture the changes in resource relations and landscapes following livelihood transitions. The locations of the 80 case-studies and seminal macro-level analyses on livelihood transitions are indicated in Fig. 1. These 80 studies chosen for the present review is an attempt to represent all the prominent agricultural regions and diverse pathways of agricultural landscape change following livelihood shifts in the Global South. The 14 locations of river basin based case-studies explore the links of landscape-livelihood changes to NRM and related

governance. The past two decades of turbulent livelihood shifts post-liberalization (1990–2014) is the time period under consideration here during which sustainable livelihood studies progressed and matured in the Global South and river basin based NRM was introduced in several of these very same locations.

The next section of the paper provides an analysis of the extent of change in agricultural employment in the Global South in relation to agricultural land area for the time period under study. It also examines the multiple strands of the livelihood studies literature, its scope, potentials and limitations within the purview of the present work. The third part critically reviews these livelihood studies across Asia, Africa and Latin America with specific attention focused on the links between changing livelihoods and rural space. The fourth section concentrates on how livelihoods and resource relations are conceptualized and operate within a river basin as an NRM unit. The fifth and the final section explores the governance implications of changed resource relations and the potentials and challenges of addressing these within a river basin management framework.

## 2. Agrarian change and livelihood transitions in the Global South

The rural and agrarian spaces of the world have been going through a phase of accelerated transformation in the past 20 years variously theorized as a structural change, a transition and/or a crisis phase (Rigg et al., 2012). Assessment of the extent of livelihood transitions began as macroeconomic analyses of the rural nonfarm sector and its various policy implications (Haggblade et al., 2010; see Supplementary material). Although the decline in agricultural employment as a share of total employment in the past two decades is consistent across the South, the share of land dedicated to agriculture in these regions show varying tendencies (Fig. 2). While African and Latin American countries display an increase in agricultural area with decreasing agricultural occupations, South and East Asia including the Pacific exhibit marginal reductions in area under cultivation with steep declines in agricultural employment. The relationship between agricultural livelihoods and land-use therefore indicates a continued but differentiated resource engagement in agriculture, the nuances of which demand a more

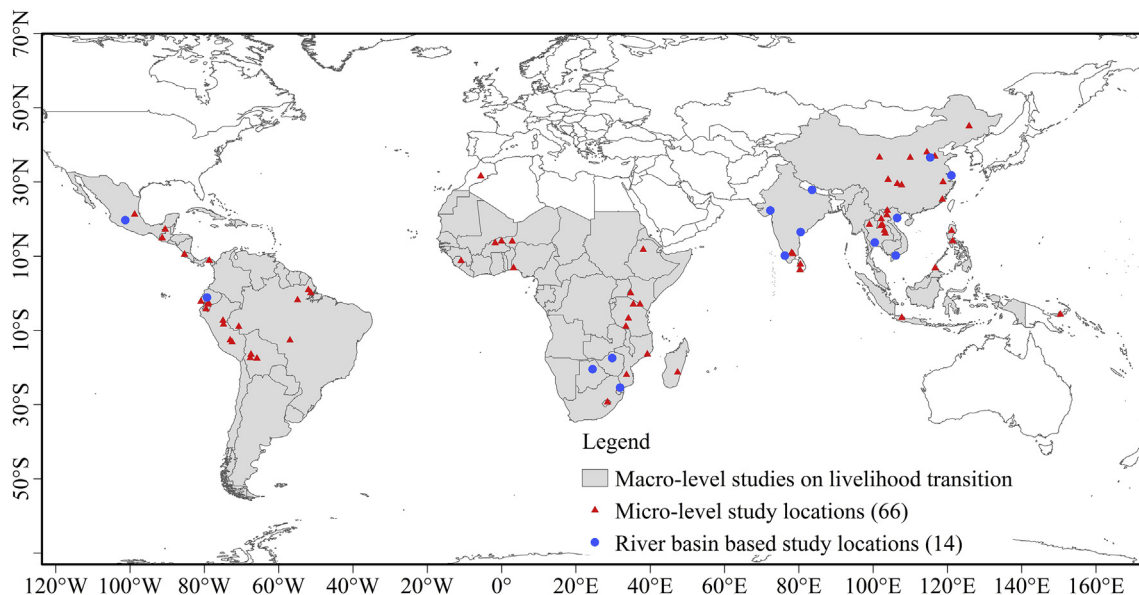


Fig. 1. Locations of macro and micro-level livelihood studies reviewed across Global South.

Download English Version:

<https://daneshyari.com/en/article/7482025>

Download Persian Version:

<https://daneshyari.com/article/7482025>

[Daneshyari.com](https://daneshyari.com)