



Photo 2: Carrier for home-made food in Dhaka Copyright Hans-Georg Bohle

Resilience as Agency

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This article re-frames resilience as a people-centred approach and highlights the importance of agency-based perspectives, taking the food system of Dhaka, Bangladesh as a case

Keywords: Resilience; human agency; capabilities; human security; megacity; food systems

Reframing Resilience: From Systems-Oriented to People-Centred Perspectives

Agency is a vital issue in the conceptualisation of social resilience and a theme that resilience discourse has, so far, failed to satisfactorily address. Whether viewing resilience as the ability to support the buffering capacities of vulnerable livelihood systems, to strengthen the adaptive capacities of people and their institutions, or to generate innovation and learning that allow for resilient transformations, the focus must be on social actors and their agency. The resilience discourse has been dominated by approaches that are rooted in ecological systems thinking. If resilience is defined as “the capacity of a system to absorb shocks and disturbance and still maintain function” (Berkes and Folke 1998: 12), then the measure of resilience is the robustness of the system and the speed of its return to a former, stable state. Such measures of resilience certainly require systems-oriented analytical approaches. Secondly, if resilience is defined as “the capacity of a social-ecological system to adapt to change through self-organisation and learning” (Berkes, Colding and Folke 2003: 14), then the measure of resilience shifts to adaptive capacities, the ability for reorganisation and renewal, and the potential for self-organisation and learning.

Such measures of resilience clearly require an agency perspective that allows for the examination of these abilities and potentials in the context of social systems analysis. A particular focus should be placed on adaptive types of governance that look at both the formal and informal rules governing social systems as well as the social agents and the agency allowing them to organise into actor-networks and actively influence the rules of the game (Etzold et al. 2009). Thirdly, when viewing resilience broadly as “the potential to create opportunities for doing new things, for innovation and development” (Adger 2006: 253), then social actors, their potentialities, their creativity and their capabilities are at the centre of analysis.

Such a perspective clearly views resilience as human agency. In this contribution, we will discuss agency-based perspectives of resilience through the analysis of the urban food system in Dhaka, Bangladesh, concentrating on issues of adaptive food systems governance and, in particular, resilient livelihood transformations of the most vulnerable.

In the tradition of (ecological) systems analysis, as represented by the first definition of resilience mentioned above, we will first look at the entire food system of the megacity, considering both its robustness and stability against shocks and disturbances, and then turn to various social actors and their social sources of resilience.

In the tradition of social systems analysis or the second definition of resilience mentioned above, we will turn to issues of food security, viewing them from a food governance perspective.

Here we will discuss how the megaurban society is organised around food and how systems of adaptive governance, learning and self-organisation influence states of food security. Finally, our resilience perspective will focus on issues of community resilience and human security, concentrating on people’s opportunities, potentialities and freedoms, or the third definition of resilience mentioned above. Agency to avoid hunger and secure livelihoods in a resilient manner will be at the centre of this final analysis. The article will conclude by proposing an agency-based resilience framework that allows for a framing and reframing of resilience from a people-centred perspective.

Analysing Resilience from a Food Systems Perspective

Food systems can be defined as the spatial, functional, social, and environmental integration of four types of subsystems: production, exchange, distribution and consumption of food. In the food systems literature, the distribution of food that mediates between the production, exchange and consumption of food is the least well-defined (Cannon 2002: 354).

Despite its overwhelming importance, the distribution system, particularly in urban contexts where practically every consumer depends on it, is not well understood. This investigation of the megaurban food system of Dhaka focuses on the function, structure and dynamics of the distribution of food.



Photo 1: Wholesale merchant for rice in Babu Bazar, Dhaka Copyright by Hans-Georg Bohle



Photo 3: Street-food vendor in Dhaka Copyright by Hans-Georg Bohle

Beginning with a brief discussion of resilience from the perspective of the entire food system, our analysis will approach the megaurban food systems from two different perspectives. The first perspective concentrates on the entry points of food into the city as well as the major distributional nodes from which food flows into the various channels of the intra-urban food system. The second perspective, on the other hand, centres on small-scale intra-urban distribution patterns, taking the informal trading of street food as a case in point.

2.1 Avoiding the Collapse: Resilience from a Food System Perspective

Urban food supply and distribution are usually seen as functioning constantly and routinely in all urban societies, and thus are often taken for granted by urban populations.

Under conditions of shock, disturbance and major food crisis, however, urban food supply and distribution can suddenly become “a public issue which can blaze on the political agenda with suddenness, urgency and often ferocity” (Guyer 1987: 1).

This is particularly true for growing megacities in poor countries such as Dhaka, Bangladesh, where food supply and distribution are precarious even in normal times and where large parts of the population have to live with the constant threat of food insecurity and hunger.

Considering Dhaka’s food system as a functional unit and measuring its robustness against shocks and disturbances in accordance with the first resilience definition, it becomes evident that the food system of this megacity has been remarkably resilient at least over the past 35 years. Since the drought of the early 1970s that coincided with the creation of Bangladesh as a nation state and the corresponding political turmoil, Dhaka’s food system as a whole has not revealed any major crisis or collapse.

Although the food supply was repeatedly strained by natural disasters such as catastrophic tropical cyclones and floods, there has always been enough food in the city to secure at least a minimum supply for the urban population. Even when political transformations, power shifts, and economic crises such as that of the 2008 global food price hikes affected the megacity, the food distribution system remained remarkably stable. What are the mechanisms that made the entire food system more or less robust and what were the implications for food security? To answer these questions, our analysis will now take a social systems viewpoint and, in line with the second resilience definition, view resilience from a food governance perspective.

2.2 Achieving food security: resilience from a food governance perspective

The newly established IHDP core project, “Earth System Governance”, views governance of the Earth system as a collection of formal and informal rules, rule-making systems and actor-networks that are set up to steer a system (ESG Science Plan 2008). In a food system context, these rules, rule-making mechanisms and networks are currently undergoing rapid changes under the impact of globalisation and global environmental change.

Food systems are becoming even more complex, and the ways in which they are managed more intricate. It is not only the capacity to govern how food is produced, consumed or distributed that is changing, but also who is able to influence the “rules of the game” (Food Ethics Council 2009). The capacities to govern food systems and to influence the rule-making of food governance are clearly important dimensions of the agency of the social actors involved.

Such capacities are expressions of the power relations within the food system. New processes of managing food are constantly reshaping the power relations within food systems.

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When conceptualising the system of food governance in Dhaka from a resilience perspective and within the normative context of food security, defined as the availability, accessibility and affordability of food, a number of agency-related questions arise (ESG-Science Plan 2008).

What is the architecture of the megaurban food system of Dhaka? Who are the agents and what is the agency that drives food governance? How accountable are the governing institutions and how adaptive is the system of food governance? What are the implications of food governance for access to and allocation of food within the megaurban food system? Looking through a resilience lens, we will briefly touch upon the central question of the adaptiveness of food system governance before discussing issues of food access and allocation in terms of the human security of the food-insecure.

The key characteristic of Dhaka’s system of food governance is the informality of the rules, rule-making systems and actor-networks that govern megaurban food supply,

distribution and consumption. We argue that the predominantly informal character of food governance in Dhaka is key to understanding the adaptive capacity of this city's food system, which largely depends on structures and processes of self-organisation, informal actor-networks, high degrees of flexibility and mobility, and self-regulated institutions of food governance. We also argue that understanding informality requires a focus on food-related institutions and social practices rather than on economic entities or an entire "informal sector". Therefore, we take the informality of Dhaka's food governance as an aspect of agency that is negotiated and contested in urban arenas (Etzold et al. 2009).

The system of food governance in Dhaka's wholesale markets for rice is an illustrative example of how informal rules and rule-making as well as actor-networks and their agency determine the adaptive capacities of the megaurban food system (Keck et al. 2009). The wholesale traders collaborate in largely self-organised market associations, respond to global price fluctuations, national supply bottlenecks, sudden interruptions in transport facilities and local food shortages in an extremely fast and flexible way, thus securing the megacity's supply of rice (photo 1).

At the same time, they also realise their profits, which may even be above average in times of food crises, by keeping contact with numerous food suppliers, importers of food, rice millers, trade associations, transport entrepreneurs, food brokers and credit institutions. On average, every rice wholesale merchant deals with seven to eight suppliers regularly, but business partners increase in number and change rapidly in times of supply crises. Wholesale traders usually maintain long-term informal relationships with select food suppliers, whereas contacts with retailers farther down the food supply chain are even more flexible, but also less stable.

What are the implications of this highly dynamic informal system of wholesale food governance in terms of food accessibility and affordability for the most vulnerable populations? To answer this question, we focus our resilience lens on the level of food-insecure communities, households and individuals, addressing their potential to create opportunities and innovation in dealing with food crises as per the third resilience definition.

2.3 Feeding The Vulnerable: Resilience From A Food-Insecurity Perspective

In Dhaka, most of the workforce is either dependent on food being delivered directly to the workplace from homes or onstreet food, prepared and consumed in streets and public places. In Dhaka, just as in other Asian megaci-

ties, an elaborate informal system of delivering home-made food to the workplace exists. Shortly before lunchtime, thousands of cycle carriers, rickshaw pullers and pushcarts deliver food to workplaces in metal carriers (photo 2). Thus, the working husband can enjoy fresh food prepared by his wife at home. For those who cannot afford such services for the delivery of highly esteemed homemade food, street food vendors step in and sell cheap rice meals (photo 3), pastries, fatty snacks, white bread, biscuits, bananas, sweet tea and betel leaves to their customers (Etzold 2008). Although this method of food consumption is essential for most of Dhaka's highly vulnerable working populations, its accessibility and affordability are highly precarious.

The key characteristic of Dhaka's system of food governance is the informality of the rules, rule-making systems and actor-networks that govern megaurban food supply, distribution and consumption.

When the wholesale merchants on the upper end of the megaurban food supply chain buffer supply crises, they usually increase food prices dramatically, putting significant pressure on the affordability of food for the most vulnerable consumers. Street food prices then increase sharply as well. In addition, numerous regulations and restrictions imposed by formal agents disrupt the smooth functioning of the street food sector in terms of food availability and accessibility for the most vulnerable. During the political regime of the so-called "Caretaker Government" (2007-2008), informal food preparation and consumption in public spaces was banned as illegal and unhygienic. "Rapid Action Battalions" and the police were employed by the authorities to confiscate street food vendors' equipment and evict them from the streets, which not only put enormous pressure on the vendors' livelihoods, but also on the food consumption options for the most vulnerable customers.

Only the remarkable flexibility and buffering capacities of the street food vendors prevented a major break-down of the food supply for the most vulnerable in the streets of Dhaka. Numerous vendors had to buy their confiscated equipment time and again, endure direct and structural forms of violence, bribe policemen, public gate-keepers and local musclemen, change the range of food items for sale, or shift from semi-mobile vending units to fully mobile vending strategies (Etzold 2009).

Vendors creativity, adaptative capacity and innovative strategies and particularly their endurance of hardship, additional work, debt-taking and self-exploitation all contributed to a minimum degree of resilience in the food consumption of the most vulnerable.

The resilience of the overall food system as well as the political stability of the country as a whole was thus achieved, among others, at the cost of the availability, accessibility and affordability of food for the most vulnerable who had to struggle even harder for their livelihoods and who spent more of their meagre incomes and of their social resources on food than ever before. To conclude, the answer to the question “how resilient is the food system of Dhaka” (Bohle 2009) depends, first and foremost, on the definition and conceptualisation of resilience.

As the case study of Dhaka’s food system reveals, the answer differs between systems-oriented and people-centred approaches to resilience. The answer also differs between resilience perspectives that take robustness and systems stability as measures of resilience, as well as between approaches that measure resilience in terms of the self-organisation of social systems and those that view the abilities and opportunities of social actors as key determinants of resilience. Our analysis of Dhaka’s food system argues for an agency-based resilience approach and is rooted in the latter two approaches.

2.4. Reframing Resilience As Agency: An Actor-Oriented Resilience Framework And Implications For Human Security

An actor-oriented, agency-based resilience framework (Fig. 1) reframes resilience from a systems-oriented to a people-centred perspective. It starts by considering social actors and their agency, arenas and respective agendas in the transformation of livelihoods in a resilient way. The framework proposes a normative context of entitlements, capabilities, freedoms and choices or, even more broadly, of justice, fairness and equity. An agency-based framework measures resilience in terms of how peoples’ livelihood vulnerability can be reduced or, to put it more broadly, in terms of their human security. Mechanisms for resilience-building, from this perspective, are first and foremost about empowering the most vulnerable to pursue livelihood options that strengthen what they themselves consider to be their social sources of resilience.

Focus	Social resilience of the most vulnerable			
Analytical perspectives	Vulnerable Social Actors	Contested socio-spatial arenas	Conflicting socio-political agendas	Differential scopes of agency
Normative dimensions	Degrees of freedom	Fairness of regulation	Accountability of governance	Scope of choices
Measures of resilience	Vulnerability reduction	Conflict resolution	Protection from violence	Strength of entitlements
Mechanisms of resilience building	Empowering peoples’ institutions	Creating enabling environments	Expanding scopes for learning	Promoting adaptive capacities

An agency-based resilience framework
Source: H.-G. Bohle, M. Keck, B. Etzold



What are the implications of this conceptualisation of resilience for human security? After the initial definition of human security in terms of “freedom from want” and “freedom from fear” by UNDP (HDR 1994), the Global Environmental Change and Human Security (GECHS) project of IHDP had broadened the concept by pointing to three basic dimensions of human security: that people have options to adapt to threats to their human rights; that they have the capacity and freedom to exercise these options; and that they actively participate in pursuing these options (GECHS Science Plan 1999).

All of these dimensions of human security, options, capacities and freedoms, point to the overarching importance of agency for achieving human security. The UN Commission on Human Security, in its report entitled “Human Security Now” (CHS 2003), integrated Amartya Sen’s capability approach (Sen 1999) into the concept of human security, addressing it in terms of the “freedom to act and to attain valued opportunities”. From these perspectives, human security, as well as social resilience, are fundamentally issues of human agency, or, as the subtitle of “Human Security Now” (2003) indicates, of “protecting and empowering people”.

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