Geographien Südasiens

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Arbeitskreis Südasien

Der Arbeitskreis Südasien in der Deutschen Gesellschaft für Geographie (DGfG) wurde im Januar 2011 gegründet. Hauptziel ist die Vernetzung von Geographinnen und Geographen, deren regionaler Arbeitsschwerpunkt in Südasien liegt. Hierzu gehört die Diskussion aktueller Forschungsergebnisse in der gesamten Bandbreite des Fachs, der Dialog zwischen Geograph*innen aus Praxis, Wissenschaft und Schule, der Austausch über die konkrete Arbeit in Südasien sowie die gemeinsame Erörterung aktueller Entwicklungen in einer sich rapide wandelnden Region. Der Arbeitskreis richtet sich hierbei gleichermaßen an physische Geograph*innen und Humangeograph*innen. Auf diese Wiese bündelt der Arbeitskreis vorhandene Expertisen und verdeutlicht die Regionalkompetenz der Geographie, auch in der Außenwirkung.

Zu den weiteren Zielen des Arbeitskreises gehören die Erstellung gemeinsamer Publikationen, die Vermittlung geographischen Regionalwissens, die Förderung der Kooperation zwischen Universität und Praxis und gemeinsame Forschungsaktivitäten der Mitglieder. Ein besonderes Anliegen ist die Förderung des intradisziplinären Austauschs zwischen physischer und Humangeographie. Aktuelle Informationen zum Arbeitskreis und seinen Aktivitäten finden sich unter: www.geographien-suedasiens.de.

Schriftenreihe: Geographien Südasien

Die vorliegende Schriftenreihe wurde vom Arbeitskreis Südasien mit dem Zweck gegründet, Einblicke in aktuelle geographische Forschung zu Südasien zu ermöglichen. Um einen möglichst großen Leser*innenkreis zu erreichen, sind die Beiträge über Heidelberg Asian Studies Publishing (HASP) kostenlos im Sinne des OpenAccess zugänglich. Die Schriftenreihe dient in erster Linie dazu, die vielfältigen Forschungsarbeiten der Arbeitskreismitglieder vorzustellen. Hierzu werden Beiträge der Mitglieder auf den jährlichen Arbeitskreistreffen in Form von Extended Abstracts in einem jährlichen Sammelband zusammengefasst. Zusätzlich besteht darüber hinaus die Möglichkeit, neuere Beiträge zur Südasienforschung in zusätzlichen Bänden ausführlicher zu behandeln.

Die vorliegenden Beiträge spiegeln lediglich die Positionen der Autorinnen und Autoren wider und nicht zwangsläufig die der Herausgeberinnen und Herausgeber der Reihe oder des Bandes.

Inhalt

Nothing to Eat but Cherries and Apples: Politics of Wheat Subsidies in Ishkoman Valley, Gilgit-Baltistan, Pakistan

Fizza Batool

Introduction

Food security is presented as a major challenge for mountain communities in the Global South. Foggin et al. (2018) argue that people residing in mountain regions are exposed to high risks and vulnerability due to climate change threats, globalization, difficult farming conditions and external markets. Spies (2018) adds the further dimension of social and political marginalization to the challenges faced by people living in high mountain regions. According to the Food and Agriculture Organization (FAO), more than 192 million people in Asia's mountain areas are exposed to food insecurity, while particularly mountainous areas of Pakistan are experiencing the highest levels of food insecurity and malnutrition (FAO 2019: 253). In order to address food insecurity, the Government of Pakistan introduced the policy of subsidized wheat in the region of Gilgit-Baltistan (G-B) in 1970s. What has been the impact of this policy in the region over the past 50 years and how it has changed the local socio-ecological agrarian landscapes, food system and diet of people has remained unclear to researchers and policy makers. This research seeks to understand the impact of wheat subsidies on local agrarian landscapes, social-ecological change, and food systems.

Fig. 1: Landscape of the study area, center village Imit, Ishkoman Valley (Photo: F. Batool)

Field-site and research methodology

Ishkoman valley, a site of this research, was a former political district of the British Government and the Dogras of Kashmir, from 1896 until 1972, and one of the many overlooked areas within G-B (Haines 2012). Today, it is sub-administrative unit of the Ghizer district and is located in in the north-western reaches of G-B in the transition zone between the Hindukush and Karakoram mountain ranges. It is located at an elevation of about 2300m-3000m above the sea level. Overall, there are 33 villages in the entire Ishkoman valley. I have chosen four villages, namely: Chatorkhand, Imit, Mantramdan and Ishkoman proper, the hamlets within these villages are also part of it. These villages spatially cover the whole valley from the beginning to central part and then upper most, remotest part of the valley.

My research employs empirically grounded ethnographic research (Delamont and Atkinson 2021), since everyday life processes help to understand the local scale and wider social processes. I followed the agrarian calendar in my field area, for eight months in 2022 (August-November) and 2023 (April-July) and was hosted by local families in their homes. My fieldwork was not limited to the villages but also covered the pastures, which are an important component of the agro-pastoral economy. I maintained a daily journal of activities and observations along with over 90 interviews, which were conducted with different actors and stakeholders— state institutions, farmers, traders, and NGO's representatives, in the valley. I used the MAXQDA software to analyze the qualitative data.

Scale of subsidies

Subsidies in agriculture have been debated for long in the world (Bellmann 2019, Kumar 2020, Mgomezulu 2024, Salunkhe and Deshmush 2014) and have been viewed differently by economists, agricultural experts, and government institutions. Kumar (2020) defines subsidy as a form of financial assistance given to an individual, business, institution or an economic sector in order to achieve a certain policy objective, meaning, and any monetary exchange, which is not directly connected to paying for a service. Here, I engaged with 'benefit in kind' subsidies where government sells at lower than market price.

The subsidy on wheat has been in place since 1972 but has varied in terms of budget and wheat allocation. Currently the Federal Government of Pakistan allocates PKR 8-10 billion (approx. 36 million US$) annually to the government of G-B, to

procure 1.6 million bags (1.5 million metric tons; MT) of subsidized wheat for the region. The wheat is acquired from Pakistan Agricultural Storage and Services Corporation (PASSCO) by the G-B Civil Supply Department and transported every month to G-B. According to socio-economic baseline report (2022) 35,000 MT of wheat is locally produced whereas 150,000 MT is imported from Pakistan's lowland. The price of a 120 kg bag by the government in 2022 was PKR1250 (4.50$). The price of the subsidized wheat in G-B in comparison to national average price is 6-7 times less per Kg (Baig et al. 2024). This subsidy covers not only the price of the wheat procured but also transportation and incidental charges. Local production of wheat is only 19%, whereas 81% of wheat is imported from outside of the region (Fig. 1).
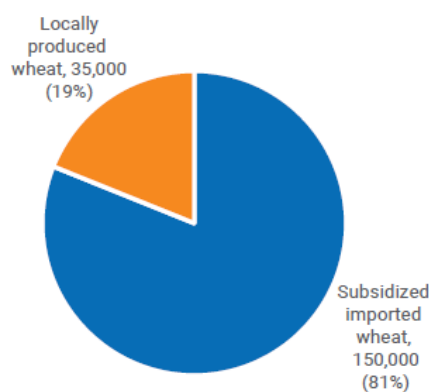

Fig. 2: Wheat production and imports in Gilgit-Baltistan (Source: Soni Jawari Centre for Public Policy, 2022, modified)

Changing agrarian practices and transformation in local food system and agriculture

Spies (2019) argues that the two most significant developments in case of G-B after joining Pakistan were the construction of the Karakorum Highway in 1978 and the deposition of last Rajas (feudalism). Although constructed for strategic purposes, the highway has significantly transformed the region and the circulation patterns (Kreutzmann 1993, 2024). Since then, the area has undergone tremendous changes such as the transition from subsistence economy to market economy and commercial agriculture (Kreutzmann 2020), the establishment of the fast growing tourism (Hussain 2019), the expansion of formal education (Benz 2013; 2014), a large flux of international NGOs and development agencies (Kreutzmann 2024), and rapid changes in people's way of life (Kreutzmann 2006; Anwar et al 2019) along with socio-ecological changes in farming (MacDonald 2010; Spies 2018) to demographic and land use changes in the region. Education and off-farm employment have tremendously increased over the decades and have changed the availability of labor needed to work on the farm (Benz 2014). Moreover, splitting of the household has led to continuous land

fragmentation and the construction of new houses on the fertile land is usurping the land further.

From food granary to begging bowl

Historically, the Ghizer region was known as the food basket of Gilgit since it used to supply wheat to all the other regions and to the garrison stationed in Gilgit (Dittrich 1998). It is clearly engraved in people's memory as one of the professors at the Karakorum University recalled:

"These days Ghizer district falls under food insecure region. Previously, it used to provide grain supply all over the region, not only to Gilgit but even to Pamirs." (Gilgit, 2022)

This transformation from excess to dependency is linked to the market-centric perspective and commercialization push of the state (Spies 2020) which has transformed the subsistence agriculture-based society into a modern, market and cash-oriented economy to "break with the past" (Edelman and Wolford 2017) and to follow the path to modernity. It can be clearly seen in the words of the director, agriculture research institute:

"We are introducing such packages which can generate more and more income and through that income people will buy other food stuff. So, when in future the subsidy is withdrawn, they can sell their produce to buy other food stuff." (Gilgit, Agriculture Department, 2022)

The provision of subsidized wheat by the state disincentivized and discouraged the farmers from growing wheat. Consequently, they shifted towards cash crop production such as potatoes (which was also sponsored by the state through subsidized seeds, credit schemes and agriculture mechanization) and later to other horticultural crops.

"Subsidized wheat is really cheap. If we grow on our own farms, it is costly, we have to bear much more expense. The question is why we should grow, when we can buy it so cheap from the state. (Farmer in Chatorkhand Village, 2022)

Horticulture - "the comparative advantage"

Interestingly, the Government of Pakistan did not devise any agriculture policy for the region of G-B for the past seven decades. However, the state has been the pushing towards horticulture since the 1970s, in particular, towards cherry, apples, apricot and almonds orchards. As early as 1972 (Abdullah, 1972), a report on agricultural development in Northern Areas clearly argues that the "*correct approach to develop these areas would be to concentrate on the development of fruit orchards by bringing more area under them and increasing yield*" (p. 12-13). Since then, all national and international institutions (JICA 2010, FAO 2015, IFAD 2015, GOGB 2018) and development agencies working in the region have followed the same strategy and have promoted horticulture and cash crops.

Only recently, in 2018, a provincial agricultural sector policy was drafted which was said to be approved by the cabinet after a small revision. This agricultural policy heavily focused on the promotion of the private sector, modernization of farming practices and further commercialization of agriculture through high value chain fruits, vegetable farming and horticulture for the "*economic growth*" (GoGB 2018). Within the policy document it is clearly stated that,

"The goal of a policy options is not necessarily to maximize growth of production in any particular sub-sector/commodity but to create the necessary and sufficient conditions for the agricultural sector/farmers to adjust to a more competitive environment and uplift their standards of living. The production structure as well as the agro processing industry and inputs delivery systems should be allowed to adjust rapidly to changes in domestic/foreign market conditions (output and input) and technologies, through changes in cropping patterns and farm structure as opposed to sticking with few crops, as has been the case" (p.3, emphasis added).

It is quite evident from the quote that the policy is not concerned with the food security and needs of the population in the region, but concerned with market requirements. This vision of the state continues to shape the local agrarian landscape in the valley. It is seen from this quote of an officer at the Agriculture Department in Gilgit:

"We are taking people towards comparative advantage. Our comparative advantage is in horticulture. Our climatic condition favours horticulture. So, we tell farmers even if there will be no subsidies then you can do trade. You can do commodity trade. Once you will have cash in hand then you can buy it from anywhere" (Gilgit 2022).

The language use by the state officials is very much embedded in the neoclassical economist paradigm.

Disappearance of local grains and local seed varieties

The food basket of Ishkoman once consisted of variety of grains such as wheat, barley, buckwheat, fava beans, millets foxtail varieties, maize, peas, lathyrus and sorghum. These cereals were grown on rotational basis as it kept the soils healthy, and beans helped in the process of nitrogen fixation. They also provided a rich source of nutrition, proteins, dietary fiber, and essential minerals with high levels of antioxidants (Khan et. al 2013). It was a common practice to mix different type of grains, such as barley, maize and millet, for bread making and it was eaten with buttermilk and yoghurt. It was commonly consumed in different forms during different seasons (York 2023) in the area. However, the reliance on subsidized wheat has not only affected the availability of food produced locally (Fig. 2) but has also resulted in the change of the tastebuds, food habits and the historical food basket. It has affected the entire local food system and caused the disappearance of numerous varieties of wheat and other local cereals. Many local varieties of wheat with the names of *Ladakhi, Bachgallian, Safaidak* and *Jaldak* were once commonly grown and preferred due to their adaptability to local environment have completely disappeared now. Fig. 3 shows the decline in the production of local grains.

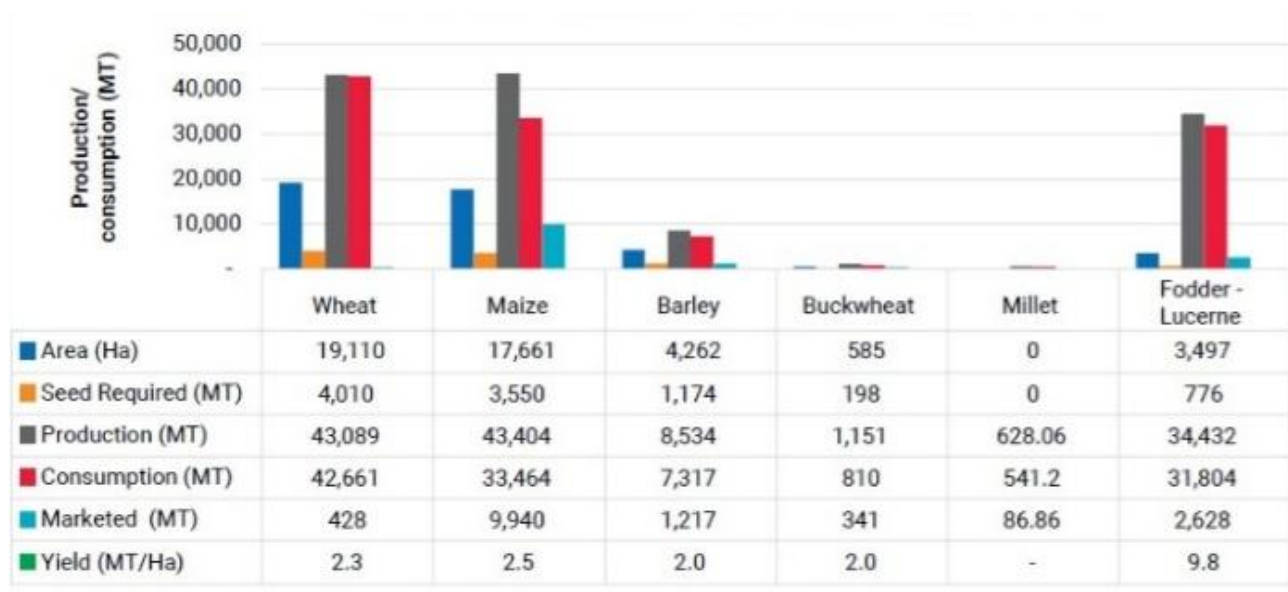|	Wheat	Maize	Barley	Buckwheat	Millet	Fodder - Lucerne
■ Area (Ha)	19,110	17,661	4,262	585	0	3,497
■ Seed Required (MT)	4,010	3,550	1,174	198	0	776
■ Production (MT)	43,089	43,404	8,534	1,151	628.06	34,432
■ Consumption (MT)	42,661	33,464	7,317	810	541.2	31,804
■ Marketed (MT)	428	9,940	1,217	341	86.86	2,628
■ Yield (MT/Ha)	2.3	2.5	2.0	2.0	-	9.8

Fig. 3: Cereal and fodder crops production and consumption in Gilgit-Baltistan 2014

(Source: Soni Jawari Centre, 2022, modified)

It was quite surprising to note that whenever elderly farmers shared the names of the old grains, it always left young people surprised as they were completely unaware about these grains, which clearly indicates that along with the loss of nutritious cereals, local knowledge, ways of production, consumption and history is also being lost in the process (Fig. 4). The state and its institutions have no interest in recording the indigenous varieties of grains and seeds. This can be seen from the quote:

"What is the value of these grains in the market? Only if they fetch a good price should they be protected and promoted" (Agriculture Research Institute, Gilgit 2022)

In view of the state officials, it is left to the market to decide what is to be protected and "*valued*".

Wheat subsidy - A consensus or contestation

Kanjwal (2023) in her latest book on Kashmir gives a detailed account of the role of subsidies on wheat and rice in remaking and shaping the sentiments of Kashmiris towards Indian state and providing legitimacy to the government at that time. She highlights that these subsidies heavily changed the diets of Kashmiris, especially in rural areas. A similar parallel was also observed in G-B, where subsidies have not only changed the social, economic systems, diet patterns and agrarian landscapes, but has also equally shaped people's opinions, sentiments, and emotions towards the state. A farmer in G-B recalled the introduction of subsidies in these words:

"We get so many benefits because of the subsidy. Because it is available at very cheap price. Government's good efforts should be equally appreciated. (Mantram Dan 2022)"

In contrast to this, some farmers, and the Awami Action Committee (AAC: a coalition of regional political, religious, and local parties) argue that state of Pakistan has used subsidy as a political tool after ending the feudal system, and for gauging the emotions and loyalties of people and for keeping the disputed region under its control.

A farmer in Chatorkhand village expressed the role of subsidies in these words:

"In one way, we have been deceived in the name of wheat subsidy, we have been made dependent on the federal government." (Chatorkhand, 2022).

These quotes show the mixed feelings of the people towards the state and its policy. However, an interesting role that wheat subsidies have played is acting as an invisible social adhesive which has brought sectarianized society together. As a state official at the Soni Jawari Institute remarked:

"This subsidy on wheat, it's a political hot potato, it's a very touchy subject. On this question, communist, Mullah, Muslim league political party, PTI (Pakistan Tehreek-e-Insaf), PPP (Pakistan People's Party), all of them get united. Whenever there is discussion on revising the policy or rates, they all get together and oppose it" (Gilgit -2022).

Fig. 4: Diversity of grains once prevailed in the region

(Photos: F. Batool)

Conclusion

The introduction of wheat subsidies by the state in the region of G-B has tremendously transformed the local agrarian landscape of the region. Ishkoman valley of Ghizer district was well known for its wheat production and soil quality and used to export the wheat to the Gilgit region and Pamirs once, now have become quite dependent on the subsidized wheat. I argue that the wheat subsidies have had a profound impact on the local agri-food system. Different local grains—barley, millet, broad peas, buckwheat, broad beans, which are identified as "super foods" that were once grown and consumed excessively have now disappeared from the local food system. They have moved from diversity of nutritious grains to "wheatification" of diets. The readily availability, continuous consumption, and cheap price of wheat have not only changed the diet diversity but also erased the traditional ecological knowledge of production, storage, and ways of consuming traditional crops and have created a social, ecological, and epistemic rift (Schneider and McMichael, 2010). The decline in crop diversity also caused a loss of species linked to these agri-food systems. Moreover, due to the supply of subsidized wheat for many years, the scattered and remote lands in the pasture have been abandoned for farming, which has also caused decline in overall household food production. The subsidized wheat has created a political dependence on federal institutions and has declined farmers autonomy over their own decision making for food production. On the other hand, the continuous push of the state toward horticulturalization (cherry, apples, and almonds) and cash crops has changed the local landscapes from farming towards orchards. It has made the remote and marginal region further vulnerable in terms of food security. The policy of subsidized wheat has legitimized the state and gauged the emotions of the society towards it.

References

Abdullah, M. (1972): Report on prospects of agricultural development in Northern Areas (Gilgit and Baltistan). Technical report, Government of Pakistan, Ministry of Food and Agriculture (Agriculture Wing). Islamabad.

AKRSP, JICA (2010): Basic study on horticulture sector in Gilgit-Baltistan. Islamabad.

Anwar, S., Khan FA, Rahman, A. (2019): Impact of karakoram highway on land use and agricultural development of Gilgit-Baltistan, Pakistan. In: Sarhad Journal of Agriculture 35(2):417–431. https://doi.org/10.17582/journal.sja/2019/35.2.417.431

Baig, S., Ullah, K. and Shah, A. (2024): The political economy of wheat subsidy and food security in Gilgit-Baltistan. RASTA (Research for Social Transformation & Advancement), PIDE, Islamabad.

Bellmann, C., (2019): Subsidies and sustainable agriculture: Mapping the policy landscape. London: Chatham House.

Benz, A., (2013): Education and development in the Karakorum: educational expansion and its impacts in Gilgit-Baltistan, Pakistan. In: Erdkunde 67(2):123-136.
https://doi.org/10.3112/erdkunde.2013.02.02

Benz, A., (2014): Education for development in Northern Pakistan: opportunities and constraints of schooling for rural households. Karachi: Oxford University Press.

Delamont, S., & Atkinson, P. (2021): Ethnographic Engagements: Encounters with the Familiar and the Strange (1st ed.). London: Routledge.

Dittrich, C. (1998): High-mountain food systems in transition: Food security, social vulnerability and development in northern Pakistan. In: Stellrecht, I. & Winiger, M. (Eds.) Transformation of Social and Economic Relationships in Northern Pakistan. Culture Area Karakorum Scientific Studies 5. Köln: Rüdiger Koppe Verlag, pp. 231-354.

FAO. (2015). Women in agriculture in Pakistan. Retrieved from www.fao.org/3/a-i4330e.pdf

FAO. (2019): Mountain agriculture: Opportunities for harnessing Zero Hunger in Asia. *Bangkok*. https://doi.org/10.4060/ca5561en.

Foggin, M., Emslie-Smith, M. and Hergarten, C., (2018): Food systems and agrobiodiversity in the mountains of central Asia. Mountain Research and Development 38(2):175-179. https://doi.org/10.1659/MRD-JOURNAL-D-18-0048.

GoGB. (2018): Provincial Agriculture Sector Policy Gilgit-Baltistan. Department of Agriculture, Livestock and Fisheries, Gilgit-Baltistan, Gilgit.

Haines, C. (2012): Nation, territory, and globalization in Pakistan: traversing the margins. London: Routledge.

Hussain, A. (2019): Transport infrastructure development, tourism and livelihood strategies: An analysis of isolated communities of Gilgit-Baltistan, Pakistan (Doctoral dissertation, Lincoln University). Jefferson City: Lincoln University Press.

IFAD (2015): Islamic Republic of Pakistan, Economic Transformation Initiative Gilgit-Baltistan: Programme Design Report. Asia and the Pacific Division, Programme Management Department,

International Fund for Agricultural Development, Rome, Italy.

Kanjwal, H. (2023): Colonizing Kashmir: State-Building under Indian Occupation. Stanford: Stanford University Press.

Khan, F., Arif, M., Khan, T.U., Khan, M.I. and Bangash, J.A. (2013): Nutritional evaluation of common buckwheat of four different villages of Gilgit-Baltistan. ARPN Journal of Agricultural and Biological Science 8(3): 264-266. https://doi.org/10.20935/AcadEnergy7649.

Kreutzmann, H. (1993): Challenge and response in the Karakoram: socioeconomic transformation in Hunza, Northern Areas, Pakistan. Mountain Research and Development, 13(1):19-39. https://doi.org/10.2307/3673642.

Kreutzmann, H. (2006): High mountain agriculture and its transformation in a changing socio-economic environment. In Kreutzmann, H, (Ed) in Karakoram in transition. Culture, Development, and Ecology in Hunza Valley, pp. 329-358. Oxford: University Press.

Kreutzmann, H. (2020): Hunza matters. Bordering and ordering between ancient and new Silk Roads. Wiesbaden: Harrassowitz.

Kreutzmann, H. (2024): Pamirian Crossroads and Beyond: Human Geography and Geopolitics (Vol. 3). Boston: Brill.

Kumar, S. (2020): Impact of Subsidies on Agriculture Sector in India. Agri mirror: Future India, 1(2):40-44.

MacDonald, K.I. (2010): Landscapes of diversity: Development and vulnerability to food insecurity in subsistence agroecosystems of northern Pakistan. In: M. Kugelman, R.M. Hathaway (Eds.), Hunger pains: Pakistan's food insecurity. Washington D.C.: Woodrow Wilson International Center for Scholars, pp. 135-159.

Mgomezulu, W.R., Chitete, M.M., Maonga, B.B., Dzanja, J., Mulekano, P. and Qutieshat, A. (2024): Agricultural subsidies in a political economy: Can collective action make smallholder agriculture contribute to development? Research in Globalization 8:100212. https://doi.org/10.1016/j.resglo.2024.100212

Schneider, M. and McMichael, P. (2010): Deepening, and repairing, the metabolic rift. The Journal of peasant studies, 37(3):461-484. https://doi.org/10.1080/03066150.2010.494371.

Soni Jawari Centre for Public Policy, Government of Gilgit-Baltistan (2022): A socio-economic profile of Gilgit-Baltistan. Baseline for green growth and inclusive development. Gilgit.

Spies, M. (2018): Changing food systems and their resilience in the Karakoram Mountains of northern Pakistan: A case study of Nagar. Mountain Research and Development, 38(4):299-309. https://doi.org/10.1659/MRD-JOURNAL-D-18-00013.1.

Spies, M. (2019): Northern Pakistan: High mountain farming and changing socionatures. Lahore: Vanguard Books.

Spies, M. (2020): Commercialization versus De-intensification? Markets, Livelihoods, and Agricultural Change in Northern Pakistan. Asien: the German journal on contemporary Asia, (156/157): 79-101. DOI: 10.11588/asien.2020.156/157.15352.

York, S. (2023): A Mountain Oasis: Daily Life in a Village in the Yasin Valley, Pakistan (Vol. 2). Boston: Brill.

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Digital Food Consumer Citizenship beyond the Indian State

Merle Müller-Hansen

Introduction

Consumption theories and citizenship theories are two mostly separate lines of inquiry. However, thinking with them as complementary theoretic strands allows us to gain rich insights. Particularly, they shed light on highly relevant research topics in food studies, for the fact that the power inherent to consumption discourses and the agency inherent to citizenship discourses intersect resolutely in our digital age.

This extended abstract delves into the intersection of food consumption, citizenship, and the impact of digital spaces on shaping contemporary food cultures in India. I draw on literature and three phases of feminist ethnography in India in 2022, 2023, and 2024. This included semi-structured in-depth interviews in a face-to-face format in Hyderabad (n= 49) and an iterative process of transcription, coding, and further analysis. My original research question aimed at digital food consumer citizenship and its potentials to disrupt and eventually heal and transform colonial trauma. For the purpose of being able to cover all the corner stones of the argument within this abstract, I ask in what way aspirational eating leads beyond the boundaries of the national state and towards a digital food consumer citizenship.

In the following, I juxtapose the digitally translated aspirational eating with dynamics of class, caste, gender, and different age groups. Herein, I emphasize the role of internet mediation in the digital age as well as the role of certain foods, in particular outside foods, in bridging socio-economic divides. Furthermore, I explore how this bridging surpasses the boundaries of the state in local-global-local diversifying ways. Keeping in mind that the ways foods travel become increasingly intertwined with smart spaces that rely on artificial intelligence (AI), I foreground the importance of relational codings of Brown, South Asian, religiously diverse, and simply female life in order to mediate a plurally thriving food culture.

Food Consumer Citizenship

Amita Baviskar's (2018) exploration of the small-sized packaged Maggi noodles in Indian dietary changes highlights social stigmatization and the lifestyle-associated signifiers associated with certain food products. She thus foregrounds the aspirational nature of food consumption. Beyond that, Baviskar (2018) challenges simplistic interpretations of cultural assimilation and instead underscores the complex interplay between traditional values, globalization, and the power dynamics of food consumption. In contrast to the notion of a 'capitalist coup' of packaged foods, she points to decolonial struggles as central to India's resistance against foreign products in the sense of import substitution and the boosting of value chains, revealing the limits of globalization in shaping the nation's food culture.

The concept of consumer citizenship, as introduced by Ritty Lukose (2009), further explores the contested cultural politics of globalization. Lukose investigates the ways in which young people in India mediate their lives between states and markets, challenging traditional notions of citizenship. She argues for a nuanced understanding of consumption under the wake of globalization, emphasizing its participatory nature and its role in shaping market, political, and cultural changes.

Here, a contested question is whether it is young people in general who innovate food consumption or rather those consumer citizens of the middle class/classes. According to Deshpande (2003), Fernandes (2006), and Ray (2019), the singular middle class of the past has not delivered its promise of uplifting across socio-economic difference but has rather acted in its self-interest. This seems to be changing with the emergent plural middle classes "which reflect a far wider range of practices set against the dominant ideas of the role of this class in Indian economic, civic, social and political life." (Ray 2019: 209).

In light of these debates, I argue that the food practices that currently innovate food consumption are driven twofold. On the one hand, digitalized consumer citizens drive food practice innovations. Digitalized consumer citizens are particularly concentrated in younger age cohorts with their large proportional population ratio (Lukose 2009), cross-cutting class and caste differences. On the other hand, the broader emergent middle classes drive gastronomic innovation. This is due to the tendency that lifestyle projections are communicated and exchanged via digital media and inspire similar

aspirations when it comes to food as a signifier of lifestyle. The lifestyles of the elites were present in my interview partners' digital bubbles, but these were relativized as being less relatable and unrealistic to reach because of structural constraints. The lifestyles projected through digital platforms by friends, acquaintances, and local or regional bloggers and influencers who can be counted into the new middle classes were oftentimes quoted as a point of reference for exploring food choices. This characterizes what I refer to as aspirational eating.

The symbolic and physical materialization of agency in consumer citizenship holds opportunities for both the new middle classes and the young generations, including also marginalized groups. This has given rise to novel spaces and identities influencing the contemporary food culture in India. Research on spatial citizenship, as discussed by Gryl and Jewel (2012) and Dorsch and Kanwischer (2019), suggests that active participation in co-creating techno-social spaces provides individuals with a political and economic voice in the digital realm (Bork-Hüffer and Strüver 2022). In the next section, I delve into these digital aspects of food and the internet-mediated food cultures. Within these evolving digital spaces, food consumer citizenship is taking shape. It is challenging the conventional dichotomy between food economies and politics through digital food cultures.

Internet Mediated Food Culture

Recent scholarship on digital spaces has highlighted that "the digital and physical spheres are now inextricably interwoven" (Bork-Hüffer and Strüver 2022: 12, own translation). Hence, it is imperative to reconsider and reconceptualize the fundamental notion of space in geography, recognizing that "the digital is progressively permeating, interconnecting, and generating space, spatiality, and socio-environmental relationships" (ibid.).

This relational approach to the digital foregrounds its dynamic and hybrid character, allowing for the continuation of old realms of experience of food in physical settings, for hybrid experiences, and new spatial (re)productions of food that actively engage with and operate through digital platforms. George Ritzer and Steven Miles (2018) explore the implications of the McDonaldization thesis in the digital age, contending that the digital realm not only expedites processes of rationalization but also intensifies levels of consumption.

The ongoing evolution of food consumption sites spans from traditional „brick-and-mortar" locales (Miles 2000) to hybrid "bricks and clicks" establishments (Belk 2013) and fully digital "spaces of flows" (Castells 1996, Goodman et al. 2009). Latest trends point towards the development of what I call "smart food spaces", drawing from Casey Lynch and Vincent Del Casino's work (2020). The concept extends the continuum to encompass such physical

spaces that are orchestrated by AI, as exemplified by Amazon Go and similar entrepreneurial projects by the Alibaba Group. These grocery stores enable checkout-free shopping via sensors that recognize customer's faces and automatically bill the selected products to their accounts.

This evolving continuum, perpetuated by the relentless force of intensified consumerism, aligns closely with the foundational principles of the digital McDonaldization thesis (Ritzer and Miles 2018) . The emphasis here lies on hyperconsumption, "the process by which the consumption of non-essential goods is supercharged so that consumers are encouraged to select items they did not know they needed or wanted" (ibid.: 8). In the context of the food industry, hyperconsumption can be linked to specific ingredients that are typically unnecessary and not deliberately sought after. A pertinent example is evident at franchised fast food chains, where the potential to ingest excessive amounts of calories, fat, sugar, and the like is acknowledged. Despite the rationality principle guiding retailers in opting for cost-effective, non-perishable ingredients, consumers are expected to follow divergent logics. For example, the discounts oftentimes offered on certain cooking ingredients via the grocery app Swiggy Instamart prompted one of my interview participants to straightforwardly say: "You don't need it but you'll buy it. You'll have 1000 rupees budget and 2000 rupees spendings". Hyperconsumption is not confined solely to ingredients; it permeates specific items, particularly what is termed as "outside foods" (Müller-Hansen et al., 2025). These are characterized by their ready-to-eat nature and commercial preparation outside the confines of consumers' homes.

In the decision-making process concerning outside foods, factors such as taste, aesthetics, and price often take precedence, relegating considerations of nutrition, ecological impact, and societal consequences to secondary positions. Due to their often small portion sizes and a converging marketing grammar (Khare 2012), many of these outside foods are accessible to both less and more privileged consumer citizens. Therefore, particularly the digitally mediated outside foods can bridge socio-economic divides through shared digital food cultures that cross class, caste, and spatial boundaries.

Furthermore, this paradigmatic shift in food consumption is not solely a consequence of food industry advancements but is deeply entwined with internet-mediated food cultures. These digital food cultures play a contradictory role in promoting and normalizing outside food choices as well as educating on health and sustainability. Despite the prevailing awareness of the adverse long-term effects associated with hyperconsumption, facilitated by digital platforms, the appeal of these choices persists. This illustrates the complex interplay between technology,

culture, and consumer citizen behavior in the contemporary digital foodscapes.

Digital Food Consumer Citizenship beyond the Hindu Nationalist State

When two young Indian men met coincidentally in a restaurant in London in the early 2000s, they connected over the "to their taste unimaginative and bad food in England" (Deininger and Haase 2021: 135, own translation). Back in India, they founded a cloud kitchen platform whose name firmly reveals the kind of foods it promoted and the kind of food it did not stand for: Fanatic Activism Against Substandard Occidental Shit (FAASOS). This counter space to imperial food culture, in direct reference to the former colonial power England, rose quickly in popularity. Not much later, however, it was branded Rebel Foods to cater to the diverse globalizing and hybridizing food cravings of their customers.

This example opens discussion for the globalization and hybridization of cuisines, and counter spaces of plurally thriving food culture, both of which must currently be discussed in the light of food cultural politics of the Hindu nationalist government in India. During my last research stay in Hyderabad, only two months before the 2024 general elections, the tension with the latter was aggravating at least temporarily.

A profound analysis of the globalization and hybridization of cuisines from a South Asian perspective was at the heart of the book Curried Cultures (Ray and Srinivas 2012). The book shows the manyfold foodways through which Curried Cultures continue to influence palates and cuisines over the globe and vice versa. Gupta concludes in the book's seminal article that "the last quarter of the twentieth century, [...] might better be understood as a particular crisis of 'high sovereignty' for the nation-state form" (2012: 42). In addition to that, the editors Ray and Srinivas

"denote a sense, or a structure of feeling, at least among urban dwellers, and especially among the middle classes, that people from all over the world have been pulled together in sharper and more proximate juxtaposition to each other. In that sense, cultural globalization is new. It is a new thing in urban middle-class conceptions of self and other, and food plays a central role in that imaginary." (2012: 26).

More than ten years after the publication of Curried Cultures, internet mediated food culture has contributed to the acceleration and of these trends. The sentiment of social belonging that surpasses the national state and is connected to shared food practices as part of defined lifestyles, as Ray and Srinivas assess (ibid.). This was also reported to me by my interview partners and it became salient through our common ground of cultural and particularly culinary understanding and the ease of building rapport. It would turn into a topic of

conversation that interview partners brought up on several occasions. For example, one over sixty years old woman reflected that nowadays people are faster in relating to people from other cultures because they've had some digitally mediated experiences already before the actual encounter and that knowing foods of that other culture played an important role in it. Moreover, my interview partners coincided in their food, health, fitness, and beauty references from Instagram, WhatsApp, and YouTube. I could strongly relate to them from my own experiences and from those narrated or digitally projected by my peers from Germany and other countries.

In continuity with the ease of building cross-cultural rapport over foods, some participants who are considered minorities in India felt more at ease talking to me alone - without the project team members from a collaborating Indian government institution. This wish did not have anything to do with them personally, but the participants were more confident talking about some of their food practices without feeling like they were under the aegis of someone who, in their eyes, represented the Hindu nationalist government that actively contributes to stigmatizing some food practices of minorities. A Christian shared with me how the situation had become more tense during the times of election. For example, neighbors were much more observant towards their cooking. They would search for traces of meat preparation and look down on the cooking of a Christian festive meat roast. Muslims also noted that the official acceptance of their food culture was being refined to the margins of Indian society. This is the case even though Hyderabad has a larger Muslim population than many other cities in India. They reported, for example, the exclusion criterion of meat preparation in rental contracts, or the negation of rental contracts altogether for themselves and Muslim friends and family members, because of the religion-associated meat-cooking. The availability of food products beyond the rice, pulses, vegetable, plus possibly egg, chicken, or mutton based South Indian diet was another issue. Some would need to travel over 8 kilometers to reach supermarkets with a more international profile to find the foods specific to certain minority food practices. Moreover, these foods were then much more elevated in price and oftentimes out of stock.

The online services available in Hyderabad, again, drew some of those nuanced lines between the diverse food cultures within one place differently. Over the popular delivery app Swiggy, for example, I was able to find an ample offer of different variations of the local Muslim festival food Haleem - as a vegetarian version or with chicken or mutton. Because of the official ban on beef, the underground-cultural beef version of the dish was not available online. The restaurants serving Haleem or Shawarma were mostly located in the somewhat segregated

Muslim neighborhoods of the city. Food delivery radiuses, nevertheless, reached to the other side of town, indicating a demand for these foods also elsewhere. Besides the promotion of these local favorites via Swiggy, the platform also promotes all kinds of culinary fusions. With fusion foods promoted via online platforms, the hybridity of food culture gains an additional dimension. Some popular hybrid foods at the time of my research went from Paneer Pizza, to Dosa Quesadilla, and all sorts of regionally and internationally fused Namkeen (savory snack) flavors. Caveat to this, however, are the monopolizing and economic-interest driven dynamics behind platforms such as Swiggy. Besides paying little to drivers and small businesses and not giving any kind of financial securities or insurances, the platform also acts differently in the less Muslim influenced parts of India. There, people would hardly find any other-than-Hindu foods, and much less any other festival foods.

Counter spaces of plurally thriving food cultures through feminist digital disruptions

Counter spaces of plurally thriving food cultures come into focus when looking at digital disruptions in the sense of Sarah Elwood's (2020) feminist relationality. The author highlights that the digital divide aligns with established intersections of social inequalities, such as class, race/ethnicity, and gender. However, she underscores the positive impact of people-centric digital platforms and practices in fostering social prosperity. Her examples focus on the U.S. American context and are originating from "Black, Indigenous, Latinx, and queer forms of life, thought, and action" (Elwood 2020: 210) that persist despite the multifaceted structural, epistemological, and material violence against these communities.

In the Indian context, an example of disrupting monopolistic practices through internet mediated food is the early years of FAASOS that aimed at a thriving South Asian food culture. Another example is the Masala Podcast by Sangeeta Pillai that aims at boosting Brown people and especially South Asian women in India and in the diaspora by exploring intersectional feminism through the topic of cultural taboos. Food plays a role in almost every single one of the over 50 episodes that are available on a variety of music and podcasting platforms so far. A third example are the community kitchens that some Muslim communities in Hyderabad have established. Poorer families pay a smaller fee and richer families pay a larger fee for everyone to get fresh cooked food deliveries from the cook of the community on a daily basis. Daily food rations can be adjusted via an online booking system a day in advance. This guarantees the necessary flexibility for occasions when a family prefers to cook by itself, when a family member is not going to eat at home, or when additional portions for visitors are needed. A fourth and last example is the freeware NutriAIDE app, coded by a Sikh developer

from Chandigarh. It features camera vision similar to the Google lens, except its AI was trained to recognize mainly Indian dishes with a high accuracy and safety protocols for the sensitive nutrition data base.

All of these examples are people-centric digital platforms that are embedded in practices that use individual agency for persisting to foster social prosperity through foods. In India and its projections beyond, the multifaceted structural, epistemological, and material violence in face of which people persist lies in intersectional inequalities. The ones that became salient here are a race/ethnicity bias entrenched in caste and class orders, classic patriarchal structures, and a governing organism that incorporates the previous points in Hindu religious principles with little tolerance for diversity. Therefore, it is essential to highlight and advance a plurally thriving food culture at this point in time - when the digital has covered much more importance over the course of the Covid-19 pandemic and AI is still being primed by the early inputs we introduce to its networks. These inputs, mainly in form of code, are heavily influenced by their creator's positionality and resulting biases. Here, counterspaces as feminist relational disruption are key. My study of the Indian context extends Elwood's (2020) learnings on communities of thriving otherwise and applies them to digital food culture. In order to retain diverse food cultures, there is an urgent need for representing and coding Brown, South Asian, religiously diverse, and simply female forms of life, thought, and action. This is a necessary step in order to balance out the dominant and over-represented food cultures. The Hindu government's neglect and selective marginalization of subaltern culinary traditions on the one hand, and, as articulated by my interview partners, the wish for "cosmo" gastronomic practices on the other hand, contribute to an expansive food consumer citizenship that transcends national boundaries. This phenomenon is accentuated by digital dynamics.

Conclusion

In this extended abstract, I explored the intersection of consumption theories, citizenship, and digital spaces in shaping contemporary food cultures in India. By considering consumption and citizenship as complementary, I outlined the dynamics of aspirational eating, driven by digitally mediated consumer citizens of the young generations and of the emergent middle classes. This highlighted how internet-mediated food cultures challenge conventional norms, fostering a plurally thriving food culture and bridging socio-economic divides.

My examination of globalization and hybridization of cuisines within the context of the Hindu nationalist state revealed tensions and opportunities. I emphasized digital disruptions fostering counter spaces of a plurally thriving food culture, exemplified

by initiatives such as community kitchens and innovative digital platforms. These people-centric efforts (aim to) challenge structural inequalities, advocating for a more equitable future in the digital food landscape. I conclude by urging the recognition

and amplification of plural voices, including Brown, South Asian, religiously diverse, and female perspectives, as irrevocable for shaping a thriving and diverse digital food culture.

References

Baviskar, A. (2018) Consumer Citizenship. In: Gastronomica 18(2): 1-10. https://doi.org/10.1525/gfc.2018.18.2.1.

Belk, R. (2013) Extended self in the digital world. In: Journal of Consumer Research 40: 477–500. https://doi.org/10.1086/671052.

Bork-Hüffer, T. & Strüver, A. (2022) (Eds) Digitale Geographien. Stuttgart: Franz Steiner Verlag.

Castells, M (1996) The Rise of the Network Society. Malden, MA: Blackwell Publishing.

Deininger, O. & Haase, H. (2021) Food Code: Wie wir in der digitalen Welt die Kontrolle über unser Essen behalten. München: Verlag Antje Kunstmann.

Deshpande, S. (2003) Contemporary India: A Sociological View. New Delhi: Penguin Books.

Dorsch, C. & Kanwischer, D. (2022) Mündigkeit in einer Kultur der Digitalität. In: Bork-Hüffer, T. & Strüver, A. (eds.): Digitale Geographien. Stuttgart: Franz Steiner Verlag, 152-166.

Elwood, S. (2020) Digital geographies, feminist relationality, Black and queer code studies: Thriving otherwise. In: Progress in Human Geography 45(2): 209-228. https://doi.org/10.1177/0309132519899733.

Fernandes, L. (2006) India's New Middle Class: Democratic Politics in an Era of Economic Reform. Minneapolis: University of Minnesota Press.

Goodman, M., Goodman, D., & Redclift, M. (2009) Situating Consumption, Space and Place. In: Environment, Politics, and Development Working Paper Series, Department of Geography, King's College London 20: 1-59.

Gryl, I. & Jekel, T. (2012) Re-centering GI in Secondary Education: Towards a Spatial Citizenship Approach. In: Cartographica 47(1): 18-28. https://doi.org/10.3138/carto.47.1.18.

Gupta, A. (2012) A Different History of the Present: The Movement of Crops, Cuisines, and Globalization. In: Ray, K. & Srinivas, T. (eds.): Curried Cultures: Globalization, Food, and South Asia. Berkeley, Los Angeles, London: University of California Press.

Khare, R.S. (2012) Globalizing South Asian Food Cultures: Earlier Stops to New Horizons. In: Ray, K. & Srinivas, T. (eds.): Curried Cultures: Globalization, Food, and South Asia. Berkeley, Los Angeles, London: University of California Press.

Lukose, R. (2009) Liberalization's Children: Gender, Youth, and Consumer Citizenship in Globalizing India. Durham & London: Duke University Press.

Lynch, C. & Del Casino, V. Jr. (2020) Smart Spaces, Information Processing, and the Question of Intelligence. In: Annals of the American Association of Geographers. 110(2): 382–390. https://doi.org/10.1080/24694452.2019.1617103.

Miles, S. (2000) Social Theory in the Real World. London: SAGE Publications.

Müller-Hansen, M., Addu, K. & Keck, M. (2025): From the "Wealthy-Healthy-Chubby" Nexus to "Outside Foods": Changing Food Consumption Practices in India and Mexico. Social & Cultural Geography. https://doi.org/10.1080/14649365.2025.2498944

Ray, R. (2019) 'The Middle Class' and the Middle Classes. In: Critical Themes in Indian Sociology. New Delhi: SAGE Publications.

Ray, K. & Srinivas, T. (2012) Introduction. In: Ray, K. & Srinivas, T. (eds.): Curried Cultures: Globalization, Food, and South Asia. Berkeley, Los Angeles, London: University of California Press, pp. 3-28.

Ritzer, G. & Miles, S. (2018) The changing nature of consumption and the intensification of McDonaldization in the digital age. In: Journal of Consumer Culture 19(1): 3-20. https://doi.org/10.1177/1469540518818628.

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Erosion of the Commons in the Karakoram of Northern Pakistan?

Matthias Schmidt

Introduction

Farming land, pastures and water are essential natural resources for millions of peasants worldwide, their availability and accessibility to are of existential importance. Yet the ability of using these resources depend not only on the extent to which they exist, but also on the associated property rights. Farming land is usually defined as private or state property; it is either owned by the cultivating farmers, by other private landowners, corporations, or the state.

The dichotomy between private and state property seems to be the norm. In reality, however, natural resources can also be subject to other property regimes, they can be considered common property or freely accessible (open access) (Schlager & Ostrom 1992). The latter applies for example to the open oceans or the atmosphere, while pasturelands in particular, as well as forests and fishing grounds, have been regarded and used as common property resources in many regions of the world for centuries. The management of such commons is based on regulations and agreements between the members of a particular group and is referred to as a common pool or common property regime (Agrawal et al. 2023).

Such common pool regimes for pastureland and water have also existed in the Karakoram mountains for centuries that ensure the functioning of irrigation systems and pasture use as well as access to these resources for stakeholders (Schmidt 2004a). These regimes have proven themselves; they are robust and sustainable and have lasted until the recent past.

Today, however, the question arises as to whether such common pool regimes are still stable against the background of modernization, individualization, and commodification processes as well as the current accelerating climatic and ecological changes.

In this respect, this article explores the following research question: How robust and sustainable are the local natural resource regimes in the Central Karakorum against the background of recent transformations or can an erosion of common pool regimes be observed?

Natural Resource Utilisation in the Karakoram

The basis for securing livelihoods in the Karakoram is the so-called mixed mountain agriculture, based on irrigated agriculture and mountain pastoralism. Sophisticated canal systems and elaborate regulations for maintenance, conflict resolution and water distribution have been developed to implement a well-functioning irrigated agriculture that provides the local population with staple foods. The intensively used farmland in the valleys is privately owned, while the essential resource water is regarded as a common good, the use of which is subject to fixed regulations. The construction, maintenance, control, and use of canal systems that bring water to the fields require the commitment of larger groups, such as the village community; no household can manage this alone. In this respect, stakeholders must come together to manage the water resources and the necessary infrastructure accordingly.

For the second pillar of mixed mountain agriculture, pastoralism or mobile animal husbandry, peasants send their livestock to pasture areas that are located at various altitudes and are grazed at different times of the year. The pastures are also considered as common lands and are managed by the village communities, since the maintenance of paths, pasture huts and stables is also a costly undertaking and can be better managed at the community level.

Based on the works of Ostrom (1990) and others, I analyzed the property and use regimes for land and water in the Central Karakoram for success factors (Schmidt 2004a). For this, I conducted intensive field research in Shigar and investigated the local resource use systems with regard to land and water. The focus was on the locally applied land and water rights as well as the practiced forms of agriculture and irrigation.

Fig. 1: Map of Gilgit-Baltistan (Draft: M. Schmidt 2024)

The Shigar Valley is located in the Central Karakoram and administratively belongs to Gilgit-Baltistan (Fig. 1), the disputed region of Northern Pakistan. The permanent settlements with their irrigated farmlands are located at altitudes between 2100 m and 3050 m (Fig. 2), while the extensive pasture areas extend to altitudes of over 4000 m in the surrounding mountain ranges. All villages have their own sophisticated canal systems to irrigate the arable lands, as the low precipitation makes irrigation necessary. Except for the former aristocratic class and a few successful businessmen, most farming households only have a small amount of arable land (1-3 ha) and small herds of livestock (cows, sheep, goats).

Fig. 2: Irrigated fields in Shigar (Village Teste) (Photo: M. Schmidt 2023)

In an earlier research project at the end of the 1990s, I could show that elaborate communal irrigation and pasture management systems exist that are robust and enable the largely sustainable use of the limited resources land and water (Schmidt 2004a, b). Thus, the local common pool regimes contribute to a regenerative use of scarce resources in the high mountains.

Questioning existing resource strategies

A fellowship from the Jakob Fugger Center of the University of Augsburg allowed me to revisit Shigar in 2023 and to examine how the use and management of land and water have changed over the last 25 years and to what extent the common pool regimes continue to exist and function. During two field campaigns of several weeks, I conducted 45 semi-standardized interviews with farmers and village leaders across Shigar in April and September 2023. The focus of my interviews and observations was on current forms of water and pasture management, perceptions and impacts of climate change, as well as on processes of modernization and commodification.

My journey through the valley quickly reveals that agriculture still plays a major role as a livelihood: intensive farming is carried out on the oasis-like agricultural land of the villages and there are almost no fallow fields visible. Confirmed by the conducted interviews, almost all households in Shigar still farm,

although for several households this is no longer their main economic activity. However, fertile arable land is transformed into built up area due to the brisk construction activities throughout the valley. Various forms of modernization in agriculture also became apparent, such as the increasing use of tractors, threshing machines, and chemical fertilizers.

Gurgling canal water and successfully cultivated fields indicate that the irrigation system is still working. Melt water from the glaciers and snow fields reaches the fields via countless, branching canals. However, what catches the eye is the fact that several canals have been lined with concrete pipes and gutters in recent years (Fig. 3). The physical canal system is being 'modernized'. This technical modernization is usually carried out with the involvement of state institutions, though the initiative comes mainly from the village communities, who apply for financial and material support from governmental or non-governmental organizations.

Whether the construction of concrete canals will improve the functionality, efficiency and durability of the irrigation system is, however, highly doubtful. Certainly, concrete irrigation canals reduce water loss and help to stabilize the corresponding canal sections. But in fact, concrete canals have a short service life and are highly vulnerable to damages, such as frost blasting, rock falls, mudslides, or slipping of gutters. In this respect, the technical modernization of irrigation canals in no way leads to greater sustainability. On the contrary, concrete constructions will require further investment after only a few years and on a regular basis. Even the Governmental Irrigation Office openly admits, that "concrete canals last only for 15-20 years. In winter, cracks are coming" (Deputy Director Irrigation, Skardu, 22.09.23).

Fig. 3: Concrete irrigation canals (Photo: M. Schmidt 2023)

With these state-sponsored interventions, the independence of village communities in water affairs is also being lost. They become increasingly dependent on external support and lose the ability to tackle tasks on their own initiative, as they have successfully done for centuries. „Today, communities

always seek for funds from the government. […] Their forefathers managed the canals alone, now they ask for support from the government" (Deputy Director Irrigation, Skardu, 22.09.23).

According to my interview partners, the local management of the canal system and the water distribution system remain largely unchanged. The village population continues to participate in community work, conflicts are settled at village level and the state does not intervene in the management system. "80% of our villagers participate in canal cleaning and repairs, the others have to pay a fine. They all participate, no one questions this system" (Teacher, 63 years, Shigar, 17.09.23). Even in governmental agricultural colonization projects or the construction of new canal systems, local management practices are considered.

The anthropogenic climate change is also becoming increasingly noticeable in the Karakoram, changing the geomorphology, hydrology and ecology of the mountain areas, and thus also significantly affecting the lives and survival of the local population. Of particular importance is the rapid melting of glaciers, which poses a serious threat to local irrigation systems. Due to very high runoff on hot summer days, the canals are exposed to extreme stress and are being destroyed in many places. They then must be repaired immediately so as not to jeopardize the harvest. "Glaciers are melting very quickly. Heavy floods destroy our fertile lands" (Farmer, 60 years, Chhutron, 12.09.23).

Although rapid glacier melt is currently leading to high runoff peaks, in the medium term it will lead to a decline in irrigation water. In particular, villages with relatively small and low-lying catchment areas without large glaciers are already affected by massive water shortages due to low snowfall during the winter months. These two threats require responses from the local population, for example by reinforcing the canal heads, as well as by readjusting the water distribution system, with the consequence that individual farmers have less irrigation water available.

While canal and water management are still practiced as a communal task in which all households participate, a significant transformation is taking place in animal husbandry. Although the vast majority of Shigar's households continue to keep livestock, many no longer participate in the seasonal pastoral works on the high pastures (Fig. 4), instead leaving their animals in the care of a few herders. This means that livestock and pasture management are increasingly being privatized or carried out by only a small number of peasants.

Due to the increasing importance of non-agricultural employment, young men lack the interest and time to work on high pastures for a few days or even weeks. "Most people don't like to go to the high pastures.

They prefer to get labour work, as the labour rate has also increased" (Headmaster, 65 years, Shigar, 17.09.23). As a result, households give their livestock to the remaining herders, who look after and milk the cattle on the high pastures during the summer months and are compensated accordingly. Overall, the number of livestock owned by individual households has fallen sharply, although livestock is still valued as a relatively safe investment.

Fig. 4: Cattle sheds at high pastures near Arando (Photo: M. Schmidt 2023)

Undoubtedly, the importance of mixed mountain agriculture for individual households is decreasing. Due to population growth combined with limited opportunities for agricultural colonization, the local population has been unable to sustain itself with food for decades. Additional income has always been necessary to purchase food. Nowadays, the need for additional cash income is increasing to participate in modernization, which includes expenses for education, health and journeys, and the purchase of consumer goods such as refrigerators, televisions, or cell phones.

In order to acquire these products, many of Shigar's male population without formal education pursue non-agricultural activities and income opportunities of which the following can be realized in the region: Labour work in the booming construction sector offers unskilled labourers the opportunity to earn an income, but usually only for a limited period. The large number of trekking tourists and mountain expeditions on the highest peaks of the Karakoram give many hundreds of young men the opportunity to work seasonally as porters, cooks or guides on mountain ventures every year. In some places, there are also seasonal employment opportunities in hotels or restaurants. The great international demand for gemstones means that its mining has become a lucrative business, while Shigar gained international reputation as a place for special gemstone discoveries. Gold panning has a long tradition in the region. In the past it was mostly carried out by external mobile groups, while today it is increasingly being conducted by locals (Fig. 5). However, the further processing and trading of gold is in the hands of foreign actors, just as it is in the gemstone industry.

The recent sharp rise in the education level also plays a major role in transforming agriculture. Whereas just a few decades ago there were only a few primary and secondary schools for boys in Shigar, today all children in the entire Shigar Valley can attend an elementary school within a reasonable distance. The appreciation of education has increased and almost all parents send their children to schools. Thus, the literacy rate has risen sharply. More and more young males and females are striving for higher education and adequate employment outside agriculture, which can often only be realized in the nearby towns, in the Pakistani lowlands or abroad. Educational migration and episodic or seasonal labour migration have a massive impact on life and livelihoods in Shigar, including the performance and importance of agriculture and consequently the management of natural resources.

Fig. 5: Gold panning at Basha River (Photo: M. Schmidt 2023)

Generally, there currently seems to be a different perception and appreciation of agriculture. On the one hand, the older generations in particular hold on to agriculture and attach great importance to it now and in the future: "Farming gives us security, not to be dependent on markets and governmental subsidies. [… However], everyone wants to start its own business" (Teacher, 63 years, Shigar, 17.09.23). The younger generation on the other hand sees this issue very differently. Many young people no longer want to conduct farming and see much greater opportunities in non-agricultural employment, as the following quote shows: "The young men of our village see farming as a total waste of time" (Farmer, 52 years, Payushu, 09.09.23).

Discussion

In the Karakoram, the "Tragedy of the Commons" could come true after all. However, not in the way postulated by Hardin (1968), who supposedly identified some systemic flaws in the concept of commons regimes, which were largely refuted already by Ostrom (1990). Nevertheless, an erosion of the commons seems to be taking place due to various modernization processes. This is because the interest or opportunities for participation in the common management of natural resources is

declining. Tasks and responsibilities are being transferred to fewer stakeholders and thus often privatized and, consequently, commodified.

As the financial resources of households in the Central Karakoram are low and agriculture is not a way for most households to generate large incomes, professional irrigation management, organized by the private sector for example, is unlikely in the foreseeable future. As the state Pakistan lacks capacity, irrigation will probably not be organized by its agencies either. In this respect, common water management will be sustained into the foreseeable future. Especially as (farming) land is regarded as a valuable resource and is only sold in emergencies.

Shigar's high pasture areas are losing their attractiveness and importance. Due to difficult accessibility, state intervention is unlikely. Herding activities will be concentrated on a few households in future. In many places, however, high pastures might be abandoned, resulting in scrub encroachment. Exceptions will be areas where valuable resources are found, or which can be used for tourism. However, the declining herding on high pastures not only changes the ecology, but also the socio-cultural function of pastoralism.

The transformation of the common pool regimes will undoubtedly have an impact on the identity of the local population in the Central Karakoram, which still identifies strongly as mountain peasants. The extent to which the erosion of the common pool regimes affects local communities and their social cohesion need to be investigated further.

References

Agrawal, A., Erbaugh, J. & Pradhan, N. (2023): The Commons. In: Annual Review of Environment and Resources 48, 531–558. https://doi.org/10.1146/annurev-environ-112320-113509.

Hardin, G. (1968): The Tragedy of the Commons. In: Science 162, 1243–1248. https://doi.org/10.1126/science.162.3859.1243.

Ostrom, E. (1990): Governing the Commons. The Evolution of Institutions for Collective Action. Cambridge: University Press.

Schlager, E. & Ostrom, E. (1992): Property-rights Regimes and Natural Resources: A Conceptual Analysis. In: Land Economics 68, 249–262. https://doi.org/10.1016/j.worlddev.2016.12.032.

Schmidt, M. (2004a): Boden- und Wasserrecht in Shigar, Baltistan: Autochthone Institutionen der Ressourcennutzung im Zentralen Karakorum (= Bonner Geographische Abhandlungen 112). Sankt Augustin: Asgard-Verlag.

Schmidt, M. (2004b): Interdependencies and Reciprocity of Private and Common Property Resources in the Central Karakorum. Erdkunde 58(4), 316–330. https://doi.org/10.3112/erdkunde.2004.04.03.

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The Gap in Awareness Generation and its Impact on the Utilisation:
A Case of RSBY in India

Priya Singh

Introduction

In India, most of the population has no health coverage. Healthcare financing in India is dominated by out-of-pocket (OOP) spending. It is estimated that around two-thirds of the total healthcare spending of an average Indian is out-of-pocket spending (Sahu, 2023). Van Doorsaler et al. (2007) state that because of high OOP expenditure, about 2 to 3 per cent of the Indian population is pushed below the poverty line each year. The low level of public spending on healthcare and the low quality of services provided at public hospitals in India are the leading causes behind the high OOP. Thus, considering the urgent need for health security, the planning commission of India constituted a high-level expert group to rework the financial and physical norms needed to ensure quality, universal reach and access to health care services (Sen, 2011). The commission recommended increasing public expenditure on health and ensuring that every citizen is entitled to essential primary, secondary, and tertiary health care services guaranteed by the central government (ibid). Thus, as a step forward towards providing universal health coverage and reducing the OOP expenditure on health in India, Rashtriya Swashthya Bima Yojna (RSBY) was introduced in 2008. It aims to provide financial protection to households below the poverty line (BPL households). The objective of the scheme was to provide financial protection to poor families from financial crises arising out of health shocks that involve hospitalisation. For a nominal fee of INR 30, families covered under this program were entitled to free coverage to 700 different inpatient medical procedures, up to an annual limit of INR 30,000 (~360 US$) per family per year (Sen, 2011). The major stakeholders in RSBY are central and state government, insurance companies, empanelled private and public hospitals, and the BPL households.
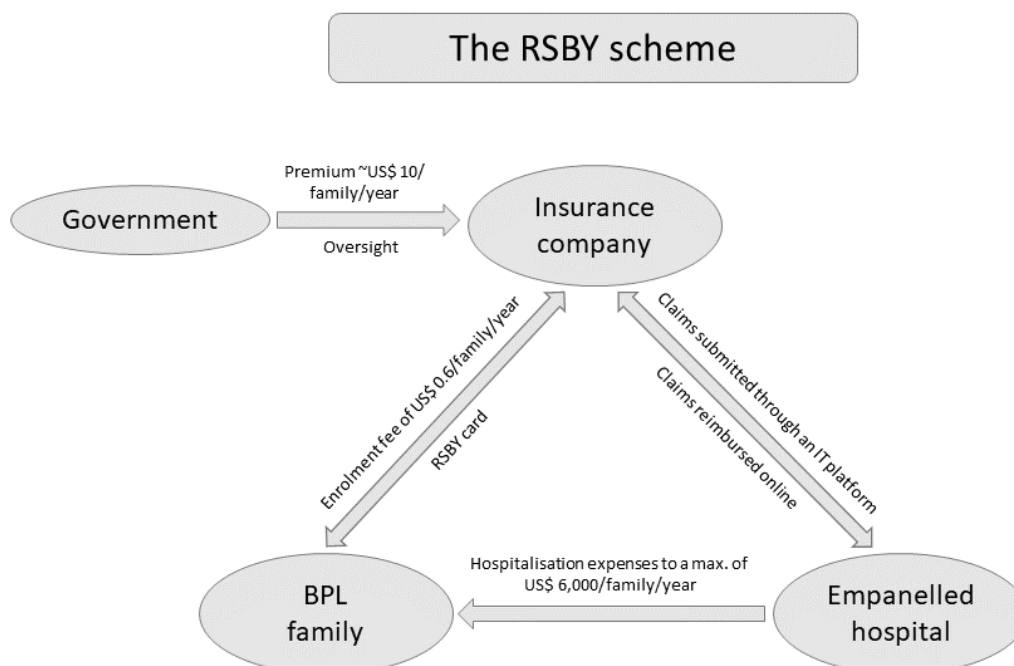

Fig1: RSBY at a glance. Source: Devadasan et al., 2013, p. 2, modified

Studies conducted on analysing the enrolment, dropout and effectiveness of RSBY (Rajasekhar et al., 2011; Raza et al., 2016) state that there is a variation across the states in India between the RSBY membership and healthcare use. Further, it has been argued that RSBY has the potential to move towards universal health coverage, given that the awareness of the program has increased (Raza et al., 2016). On the surface level, the awareness about RSBY seems reasonable; however, when studies delved deeper into identifying the awareness of the target population about the features of the program and the process of utilisation, the awareness was found to be low to none. One independent knowledge, attitude and practices (KAP) study by Taneja & Sihare, 2011 found that the beneficiaries were aware of the amount of total coverage available, the number of family members covered and the amount required to pay before enrolment, etc. However, they were completely uninformed about various entitlements related to the scheme, such as transportation allowance coverage, nature of treatments covered, coverage for expenses on OPD treatment, and amount of claim coverage available for specific diseases, among others. A study by Rajasekhar et al. (2011) claims that many beneficiaries were not aware of how and where they could utilise the benefits of the program. The existing literature concluded that low awareness is a reason behind the low utilisation of the benefits of the program (Thakur, 2016; Bandyopadhyay & Sen, 2017). Thus, it is important to understand the gaps in the process of awareness generation that might be causing the low utilisation of the programs. It is required to understand the sources of information dissemination and the type of information communicated to the potential beneficiaries about the program. Thus, this research attempts to fill the gap in the literature by exploring the primary sources of awareness generation for RSBY. Further, I explore the gaps in these mediums, which might impact the (low) utilisation of the program's benefits.

Methods

This paper is part of an ongoing PhD project focusing on the health security of the informal workers in India. It is based on the first part of the project, aiming to explore the gaps and challenges in the implementation of health security programs in India, which impact informal workers' access to benefits. For the PhD project, I conducted expert interviews with the stakeholders engaged in the implementation of RSBY in the Begusarai district of Bihar, India, to identify the gaps in the implementation process. The interviews were conducted for three months, from March to May 2019. For ethical reasons, I cannot disclose the current or previous position holdings of the interviewees. However, I am sharing an overview of the departments where the interviews were

conducted in Table 1. Further, I used thematic analysis (Ryan & Bernard, 2003; Bogdan & Biklen, 1997) to analyse the interview data, keeping the research question in mind.

Table 1 List of interviewees

No.	Name of departments	Total n
1.	District Health Society	6
2.	District Public Hospital	1
3.	Private Empanelled Hospital (at district)	1
4.	Private Insurance company & Third-Party Administrators (TPA)	2
5.	Front-line workers	2
6.	Panchayati Raj Institutions Representatives (PRIs)	2
	Total	**14**

Findings

The process of awareness generation is a vital step in the implementation of any social welfare program. It directly impacts access to the program, the success of the program, and, eventually, the attitude of intended beneficiaries toward the program. Various problems such as misinformation, partial information, and distorted information could pose a threat to the outcome of the program. Misinformation about the features of the program can have a negative impact on the program outcome (Thakur, 2016; Bandyopadhyay & Sen, 2017). In contrast, partial or distorted information will directly impact the beneficiaries' access to the program. In RSBY, the responsibility for awareness generation is primarily given to the insurance company (IC). The process of awareness generation in the Begusarai district was conducted through various mediums, such as front-line workers engaged in the program implementation, elected representatives, and program documents, among others.

Through front-line workers

As per the implementation structure of the RSBY program, a front-line worker was designated as the Field Key Officer (FKO) as a government representative for the on-ground implementation. FKOs have been engaged in awareness generation by the IC through the distribution of a printed "intimation slip" with information such as the name of the family head, names of family members, and date of enrollment to each eligible beneficiary household. The FKO's visit to the potential beneficiary's household was envisioned to be an

effective strategy in terms of outreach to the program and spreading awareness about the program's features among the beneficiaries.

However, the front-line workers themselves lacked an understanding of the software-based program. It brings upfront the challenge of half or misinformation being communicated to the eligible households. The district officials also highlighted this potential threat during the interviews. There are no accountability measures to check on the information being shared by the front-line workers.

Through the Panchayati Raj Institution (PRI) members

The PRIs have been engaged in the implementation of several welfare programs of the government in the village. As for the awareness generation of RSBY, the PRIs were expected to inform the beneficiaries about the features and functioning of the program. However, during the interviews, the PRIs informed me that due to a lack of resources, such as a lack of technical skills and poor internet connectivity in rural areas, they were not updated on the latest developments in software-based programs.

Moreover, the political affiliation of the elected representatives of the village and the central government has an impact on the successful implementation of the program. The elected representatives belonging to the same political party as the central government would have higher motivation to implement the welfare program introduced by their political party rather than their opposition party. Thus, the generation of awareness of a program depends on the political affiliation of the PRIs.

Through program documents

Program documents include pamphlets, flyers, or any document designed precisely for a particular program. It contains information about the program features and the benefits available for the beneficiaries. For RSBY, the program documents were pamphlets and brochures to be shared with each enrolled beneficiary, together with the health insurance card at the enrolment station. The pamphlet of RSBY had details about the program, such as empanelled hospitals in the district, toll-free numbers, etc. for the beneficiaries.

The program documents were not distributed uniformly across the districts, leaving many potential beneficiaries with no information on the functioning of RSBY. The non-distribution of the program documents left the beneficiaries with no choice but to choose the public hospitals with poor- and low-quality services (please see Das & Hammer, 2007; Rajasekhar et al., 2011 for detailed discussion) or incur out-of-pocket expenditure. In either of these cases, the objective of RSBY to provide quality health care and reduce financial burden has not been achieved. Moreover, the expectation of the planning

body from the illiterate and low education group to understand the program features and functioning through the program documents is further an ambitious approach.

Other means of awareness generation

Apart from these, other means used to spread awareness about the program include loudspeaker announcements in the village, jingles, advertisements on various communication channels such as newspapers, television and radio, and banners and posters, among others. All of these means focused on the surface information about RSBY while missing out on how and where to utilise the program benefits.

The gap in awareness generation

Above, I have discussed the various means of awareness generation used for health insurance programs. For RSBY, the primary responsibility of conducting an awareness generation program was given to the insurance company. The responsibility of generating awareness through the insurance company has two significant problems. The first is the model of functioning of the insurance company, which functions on higher premiums and fewer claims. Following this model, the awareness generation campaigns focused on spreading information about the enrolment process of the program while ignoring the information about the utilisation of the benefits of the program. The second problem is a structural problem. The insurance companies that are experienced in dealing with the middle- and upper-middle-class population had to deal with the lower socio-economic groups under RSBY, whose needs and requirements were different. This population group requires extra effort in terms of awareness. Thus, the awareness generation through the insurance company side-lined the information about the process of utilisation of RSBY, which resulted in the low utilisation of the program's benefits.

Conclusion

RSBY is a social health insurance scheme focused on improving poor people's access to health systems without financial burden. However, the gaps in the on-ground implementation of the program have resulted in the lower utilisation of the benefits. The program implementation is a vital stage in planning a welfare program. The strategies used at the different stages of the implementation process as adjustments to the initial implementation plan had a direct impact on the outcome of the program. In RSBY, the awareness about the utilisation of these health insurance programs has remained an ignored aspect in the awareness generation campaigns. It can be argued that the campaigns were intentionally designed to skip information on the process of utilisation of the program. The findings of this research complement the findings of the studies by

Thomas et al. (2019) and Thakur (2016) conducted on RSBY, showing low awareness of certain aspects of the program. Furthermore, the findings of this study will help to improve the implementation of the

currently functioning Ayushman Bharat-Pradhan Mantri Jan Arogya Yojna (AB-PMJAY), which has replaced the previously running RSBY with better financial coverage.

References

Bandyopadhyay, S., & Sen, K. (2018). Challenges of Rasthryia Swasthya Bima Yojana (RSBY) in West Bengal, India: An exploratory study. The International Journal of Health Planning and Management, 33(2), 294-308. https://doi.org/10.1002/hpm.2453.

Das, J., & Hammer, J. (2007). Money for nothing: the dire straits of medical practice in Delhi, India. Journal of Development Economics, 83(1), 1-36. https://doi.org/10.1016/j.jdeveco.2006.05.004.

Devadasan, N., Seshadri, T., Trivedi, M., & Criel, B. (2013). Promoting universal financial protection: evidence from the Rashtriya Swasthya Bima Yojana (RSBY) in Gujarat, India. Health research policy and systems, 11(1), 1-8. https://doi.org/10.1186/1478-4505-11-29.

Jena, B. B. (2020). Challenges in Implementing Pradhan Mantri Jan Arogya Yojana (PMJAY): Empirical Findings from RSBY Study. In: Ranjan Chaurasia, A. & Jungari, R. (eds): India 2019. Population and Sustainable Development, pp. 31-42. Bhopal, Madhya Pradesh : MLC Foundation.

Rajasekhar, D., Berg, E., Ghatak, M., Manjula, R., & Roy, S. (2011). Implementing health insurance: the rollout of Rashtriya Swasthya Bima Yojana in Karnataka. Economic and Political Weekly XI.VI(20): 56-63. https://www.jstor.org/stable/23018214.

Raza, W., Van de Poel, E., & Panda, P. (2016). Analyses of enrolment, dropout and effectiveness of RSBY in northern rural India. MPRA Paper No. 70081. München.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. Field Methods, 15(1), 85-109. https://doi.org/10.1177/1525822X02239569

Sahu, S. (2023). The Politics of the Public Health System in India. In: Kumar Jha, M., & Nayan Choubey, K. (Eds.) Indian Politics and Political Processes: Ideas, Institutions and Practices. London: Routledge, pp. 512-526. https://doi.org/10.4324/9781003434443-27.

Sen, G., Bang, A., Chatterjee, M., Dasgupta, J., Garg, A., Jain, Y., & Varkey, L. C. (2011). High-level expert group for universal health coverage. New Delhi: Planning Commission of India.

Taneja, P. K., & Sihare, H. (2011). Pros & cons of micro health insurance to eradicate health problems in the

Below Poverty Line (BPL) population: empirical evidence from India. Italian Journal of Public Health, 8(4): 359-374. https://doi.org/10.2427/5683.

Thakur, H. (2016). Study of awareness, enrollment, and utilization of Rashtriya Swasthya Bima Yojana (national health insurance scheme) in Maharashtra, India. Frontiers in Public Health 3:282. https://doi.org/10.3389/fpubh.2015.00282.

Thomas, B., Mishra, S., Nimbalkar, S., Phatak, A., Shinde, M., & Talati, K. (2019). Study on Level of Awareness and Factors Contributing to Non-Utilization of Rashtriya Swasthya Bima Yojna (RSBY) in Charotar Region, Gujarat. Social Work Chronicle, 8(1): 80-93.

Wagstaff, A., O'Donnell, O., Van Doorslaer, E., & Lindelow, M. (2007). Analyzing health equity using household survey data: a guide to techniques and their implementation. Washington, D.C.: World Bank Publications.

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