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# ***Puffed rice to potato chips – malnutrition & changing food culture in rural India***

by Kaberi Dutta

***WATER FOOD DIABETES AYURVEDA GENETICS POVERTY YOGA STDS HISTORY SEX  
SOCIETY FAMILY PLANNING CASTE GENDER RIOTS RELIGION HEALTH  
DEMOCRACY FLOODING WASTE-MANAGEMENT UNANI PSYCHOLOGY FOLK  
MEDICINE AFFIRMATIVE ACTION GLOBALISATION BIOCHEMISTRY OLD AGE  
REPRODUCTIVE HEALTH MALARIA POLICY HIV AIDS WHO MEDICOSCAPES  
COLONIALISM PHARMACY RELIGION LEPROSY BOTOX DEHYDRATION NGOs***

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# Puffed rice to potato chips:

Malnutrition & changing food culture in rural India

Kaberi Dutta

**MASTER THESIS: MA, HEALTH & SOCIETY IN SOUTH ASIA**

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Master's thesis

## **TITEL**

### **Puffed rice to potato chips: Malnutrition & changing food culture in rural India**

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## ABSTRACT

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Malnutrition has been a chronic problem in India, initially owing to abject poverty of its population. But lately, despite considerable improvement in the economic conditions and government's efforts of providing subsidized food to the poor in various forms and through various outlets, nutrition status of societies has not experienced the expected improvement. This, the current study finds, is linked to skewed and misinformed perceptions of nutrition among the new-age parents across rural societies, shaped by the media in a vacuum of information and knowledge. The modern food industry and capitalist enterprises enter the societal psyche through this gap with their lucrative campaigns, which have had captivating impact in shaping what I describe as "food euphoria" for some kinds of items while a "food fatigue" for other, more traditional kinds of eating practices. Greater 'values' and 'meanings' are attached to certain kinds of processed and packaged food for their perceived benefits of both mind and body today, following which purchasing decisions are made and the items consumed. Apart from such misinformed decisions, ecological shifts and climate change are also affecting nutritional outcomes with negative impacts such as unavailability of milk in the daily diets of children. Altered social dynamics like migration of parents have added significant extra burden on the children that manifest in an array of health hazards encompassing the psychological and nutritional. This demands a multi-scalar and multidimensional approach towards the governance of nutrition that is proving to be overwhelming for policy actors. However, uncovering multifarious drivers is an important first step to understand how intricately poised the nutritional outcomes were. It clearly underlines limited efficacy or even futility in some cases of food subsidies aimed at alleviating poverty-related malnutrition. It bolsters the anthropologist's conviction that matters of health, more so in public health, were a societal, cultural construction instead of being deterministic and rather simplistic biomedical eventuality (Dauglas & Khare 1979). In Sundarbans, 'nutrition' remains situated at the complex intersections of modernist cultural evolutions in the society and becomes a product of interplays between diverse ranges of ecological, social and economic entanglements.

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## Cultured food: Ingredients of (mal)nutrition?

Their lunchboxes no longer contain *muri-narkel* (puffed rice and coconut), *tiler naru* (sweet sesame balls) & *taler bora* (palm-kernel chops), *gur* (jaggery), *chhola* or *chal bhaja* (roasted gram or rice). Dried instant noodles, synthetic jellies, candies, lozenges, *Kurkure* (claimed to be a lentil-based snack by Pepsico), potato chips have replaced them. Instead of home cooked food, children find those advertised profusely in the media and available in the local groceries in bright-coloured packages not only to be much more attractive but surprisingly, tasty too. Their parents also feel that these are nutritious for their children and spend disproportionate amounts of their family budget on an array of health drinks so that the children can concentrate on their studies better.

Rural India of today seems a conundrum incarnate – a cocktail of rising aspiration, absence of information in public domain and awareness, a shift in focus away from traditional knowledge and rapid ecological / environmental changes. The culmination has initiated evolution of a food culture among children and their parents that seemingly has little nutritional value, neither has it resulted in improvement of the health of communities or societies in transition across rural India (NSSO 2014, Basole and Basu 2015). The country – an aspiring superpower – bears the burden of a staggering 48 per cent of its children and about 30 per cent its adults (NFHS 3)<sup>1</sup> stunted, wasted, underweight and anaemic even at the cusp of the 21<sup>st</sup> century. The volume of malnourished children in India outnumbers that in the entire sub-Saharan Africa (Nair 2007, Kumar 2007). It is indeed intriguing that improvements in the socio-economic indicators including higher purchasing power, higher disposable income, improved mobility and access to services and products that define ‘wellbeing’ in the existing development paradigms in the rural spaces have had limited impact on expected nutritional enhancements.

Amartya Sen, in his work on Bengal famine (1981) showed that it was lack of ‘access’ that led to the famine and not ‘availability’ or ‘paucity of food’. It would be a pertinent question to ask then, why now, despite improved access to and availability of food in the recent times, these many children remained undernourished across the country, which Basole & Basu (2012) rightly describe as

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<sup>1</sup> National Family Health Survey 3, <http://www.rchiips.org/nfhs/nfhs3.shtml>



a 'puzzle'. Along with improved access and affordability of food across societies; even a slew of government measures such as mid-day meal that provides free, cooked meals to children at schools, village centres (*Anganwadi*) that offer free dietary supplements to children up to six years of age have failed to achieve desired nutritional standards for children. Alleviating the burden of malnutrition is crucial from the individual perspectives as better health condition allows one to enjoy freedom of movement, education, work and entertainment (Sen 1999). It is also vital from the collective national perspectives as persistent malnutrition costs the country 4.2 per cent of its Gross Domestic Product (GDP), and "*saving all the malnourished infants from mortality for a single year would lead to saving of...the equivalent to 50 to 120 per cent of India's GDP today*" (Bhandari et al 2004:16).

The National Sample Survey Organization's (NSSO) latest household survey (2014) has pointed out that even in cases where people did spend more on food (which has also increased significantly), it was without expected nutritional gains or outcomes. This was because the rising income often got diverted to non-food, aspirational items (Deaton & Dreze 2009). This work attempts to solve this seeming puzzle using anthropological tools in rural West Bengal, India, where malnutrition debilitates a large number of children and adults alike. Rural Bengal, as much as most rural parts of the country, is still plagued by poverty when compared to international standards. However, a link between poverty, food shortage and malnourishment has been an obvious one, covered by a volume of academic explorations.

While the poverty in the Sundarbans is still stark, it has improved considerably over past decades. In spite of rising incomes, economic opportunities, educational standards, proximity and much improved access to Kolkata now compared to that a few decades ago, 512 out of every 1000 children are found to be malnourished here (World Bank 2014). This is why, population in the Sundarbans become a representative society in transition to analyze malnourishment with a focus on evolution of food cultures. Instead, it seems critical to understand why rural societies in transition across India, with a degree of self-assertion of the subjects themselves that allows leaving out poverty as a determinant of malnourishment from the analysis; are not being able to enjoy better nutritional outcomes that will allow children and adults alike to have productive and happy life. A life free from the burden of diseases also save one recurring costs on



healthcare. Apart from stagnated expenditures on food items despite increased household incomes (Basole & Basu 2015), coupled with disproportionately higher expenses on non-food items, this inquiry finds, rather significantly, that choice and mix of foods purchased and consumed have altered considerably, at the detriment of nutritional outcomes. Basole & Basu (ibid) also indicate a squeeze in food budget, claiming that diversification in diets to have led to dwindling calorie intake.

This thesis is divided into five main sections including the introduction; the state of the art that immediately follows the introduction, and then a detailed section on description of the field, Indian Sundarbans, followed by methodology about how the research was conducted. In the subsequent section, the narratives of changing food culture, choices and perceptions about nutrition are described along with the expert and policy discourses. These offer various perspectives of and prospective entry points into the answer to the research question. In the next section, these findings are analysed to develop an understanding of the ‘everyday nutritional world’ – borrowing the concept of Ingold (2011) – of the children. In the discussion, various disparate causatives and aspects are segued and a clearer understanding of malnutrition in societies in transition emerges.

### **Research question:**

Why a shifting food culture towards increased & diversified consumption is failing to cure the evil of child malnutrition in Indian Sundarbans?

## Cuisines, cultures & calories: State of the Art

Pinstrup-Andersen and Watson (2011) characterize malnutrition in developing countries as a triple burden: undernourishment (insufficient calorie and protein intake), micronutrient malnutrition (hidden hunger), and over nutrition (excess calories leading to overweight and obesity). In 2010, undernourishment and micronutrient malnutrition affected about 0.9 and two billion people respectively in developing countries (FAO, 2013; Gómez et al., 2013). Malnutrition affects millions of individuals worldwide and in India continues to be a formidable challenge to governments, donors, and individual decision-makers.

India's poverty has diminished considerably over past 25 years – from 48 per cent in 1990<sup>2,3</sup> to 23 per cent in 2013. A spate of reforms and average GDP growth of 5-6 percent in last two decades, with a peak of 11.4 percent in 2010<sup>4</sup>, has pushed income levels up individually and per household without the expected positive impact on nutrition. Though it has been recorded how people were increasingly forced to spend more on non-essential items sacrificing food expenses, the latest NSSO (2014) pointed out that even in cases where people did spend more on food (which has also increased significantly), it was without desired nutritional gains or outcomes, underpinning a failure of a dominant development paradigm. Poor nutritional standards across households despite overall economic growth and concomitant increase in availability of and access to nutritious food across have been described as a *'puzzle'* (Basu & Basole 2012) that baffle social and biomedical scientists alike. The quantitative validation of this phenomenon from NSSO has further bolstered the *'puzzle'*. While process of statistical representations is often questionable, metadata of this nature is the only marker that policy processes access and use. The 'percentage of error' (borrowing the term from statistics) also makes 'percentage of validation' a truism to some respect (Messer 2004).

Malnutrition also depends upon the attitude, culture and beliefs of the caregivers whose role and contribution towards nutritional status of their children

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<sup>2</sup> [http://articles.economicstimes.indiatimes.com/2013-07-05/news/40391966\\_1\\_extreme-poverty-southern-asia-mdg](http://articles.economicstimes.indiatimes.com/2013-07-05/news/40391966_1_extreme-poverty-southern-asia-mdg)

<sup>3</sup> <http://data.worldbank.org/country/india>

<sup>4</sup> <http://www.tradingeconomics.com/india/gdp-growth-annual>

make a remarkable difference (Sikkink 2009). Thus, the problem of malnutrition across the globe, especially in developing and under-developed nations, does seem to have many complex drivers apart from poverty (Dettwyler 1993). Critical changes in the consumption and dietary patterns along with changes of food culture, food choices and their concomitant impact on undernourishment in developing countries has not been studied in detail, however, impact of these changes on obesity in developed countries and in urban areas of developing countries have received considerable attention (Julier 2008, Dirks & Hunter 2013). Scientists have also long recognized the importance of the demographic and epidemiological transitions in higher-income countries and have more recently understood that similar sets of broadly based changes are occurring in lower-income countries as well. However, much controversy surrounds study of this process, which tends to assume increase in energy intake with corresponding increase in income levels. An interdisciplinary approach of medical anthropology that encompasses interrelationships of society, culture and biology on one hand and sickness and healing on the other (Hahn 1999) seem only apparatus that might solve this *'puzzle'*. Complexities in nutritional outcomes can be better understood by social and cultural anthropology that informs medical anthropology most heavily.

### **Anthropology of nutrition & food: A policy approach**

Nutrition is key to health, productivity, wellbeing and welfare of the human race. However it is still one of the least understood and under-explored subjects because of the overwhelming complexities involved in its exploration that intersects science, anthropology, sociology, cultures, political science and biomedicine (Chrzan 2013). Oversimplification of nutrition among a large group of scholars along a mere 'cultural' and 'biological' axes intersecting the axes of 'modern' and 'traditional' (Ulijaszek & Strickland 1993) has also hindered a holistic understanding of nutrition. Majority of multilayered analyses situate themselves at the intersection of these two axes of polarizations, leaving out closer examinations of the interplays between the biological and social aspects of food and nutrition (ibid). Special emphasis must be – firstly, on the poorer parts of the world, and secondly a myriad of additional drivers such as socioeconomic and

demographic shifts that now play critical roles in determining nutritional outcomes and standards across societies (Popkin 2001), despite improved access to nutritious food in the time of rapid global change.

In India too, a slew of programs and policies including mid-day meals in schools, nutrition centres, *Anganwadi* and *Asha* workers to help marginalized societies for past about 15 years have not been able to meet their targets in their mission to eradicate malnutrition. The simplistic notion that economic growth, poverty reduction and subsidized food will lead to desired enhancement of nutrition levels has also proved to be a mere heuristic device. This calls for designing and targeting policies to expand the study of nutrition beyond the work of ‘nutritionists’ who work on malnourishment problem as a part of the study of food science, identified through basic metabolic rate (BMR), total calorie intake and energy loss in a scientific way barring culture, social, economic variations, which could be measured through an identical scientific measurement. Anthropological work on the food and nutritional value focuses on the food culture as a holistic part of the nutrition of any particular society. ‘Deciphering a meal’ (Douglas 1972) and food culture is critical to supplement the scientific analysis on nutritional values, which varies significantly across different societies.

Early anthropological work on nutrition in developing societies focused mainly on subsistence patterns (Chrzan 2013) in relation to health that confined inquiry to the ecological and biological aspects of community nutrition (Ulijaszek & Strickland 1993), not symbolism of food use and cultural determinants of food habits. The other strain of nutritional anthropology focused on adaptation and evolution of species (Mann 1972, 1981; Garn & Leonard, 1989; Gordon 1987; Bogin 1991; John 1996; Ungar 2007; Wrangham 2009). Yet another strain of studies focused on a co-evolution model where learned (cultural) behavior widened the range of potential dietary items and increased the diversity of food choices, pitching the learned behavior as part of adaptive behavior (Milton 1993). When nutrition acts as a biological adaptive tool, it is examined both as a stressor and a resource (Bailey 1993; Stinson 1992). However, such a biological understanding of nutrition considerably limits our knowledge as to why populations choose certain food over others when poverty is not a common denominator. The significant link between how processes such as globalization, industrial homogenization shape food choices (Heath & Menely 2007, Terrio 2000) and their nutritional outcomes

remain unexplored. Food research has not dealt with how meals are planned (McIntosh 2013) what distinguishes meals, foods, and consumption of food items in general, how knowledge is constructed regarding 'values' attached to times of consumption, meals and food while processing the daily lived experience of various groups and subgroups. Also critical is how these values have changed with changing scales of social capital, where 'values' and 'meanings' regarding food have become interchangeable.

In theory building, food systems have been used to illuminate broad societal processes such as political-economic value-creation (Mintz 1985), symbolic value-creation (Munn 1986), and the social construction of memory (Sutton 2001). Global changes have occurred at a breakneck speed over past decade or so, challenging academics and scholars to interpret altering 'values' and 'meaning' and find out how to incorporate them into policies — evolving heterogeneity in both sociocultural and biological aspects of nutrition across and within human communities has never been more important because global sociopolitical and economic changes exert consequences on dietary and physical activity patterns and produce strong social gradients in nutritional health (McGarvey 2007, Reyes-Garcia et al. 2008, McGarvey, Stephen 2009).

Developing countries in the South are perfect sites for examining aspects of nutritional anthropology and anthropology of food. However, its interdisciplinary nature necessitates understanding the entire gamut of variations in diet, activity, physical growth and development patterns, and functioning in relation to our evolutionary history, bio-cultural adaptive processes, contemporary ecological settings, and socioeconomic forces and their interactions (Haas & Pelletier 1989, Ungar et al. 2006). The International Commission, under the sponsorship of the International Union of Anthropological and Ethnological Sciences (IUAES), encourages global research and interaction among anthropologists conducting studies on food, and to make anthropological expertise available to nutritionists, ecologists, economists, agricultural experts, policy makers and other specialists concerned with food problems (Douglas & Khare 1979) at the same time invigorate local knowledge to find meanings and situate them in the 'nutritional' context.

However, anthropologists also have much to coordinate among and cooperate with biological scientists and nutritionists as well, coopting with quantitative approaches in the future (Dirks & Hunter 2013). Works of Messer

(2004) have already stressed upon the importance of a mixed-method and triangulated approach, and utility of using ‘data’ in anthropological work. While nutrition data from agencies such as NSSO (2014) offer critical first level insights into ‘what’ choices people make and their outcomes, cultural anthropology methods and tools are well positioned and equipped to inform ‘why’ these choices are made. This research used data as an entry point and secondary resource for the study, but it remains skeptic to anchor the study on the premises of statistical evidence. During my fieldwork, I experienced considerable manipulation in data gathering that reinforced my doubt about veracity and authenticity of government reports. This is why the block-level data from government offices were not accessed as the research targets understanding the determinants of undernourishment that are nestled in the society, not in the government annals which “*imposes not just by creating administrative rulings but by the determining classifications within which people must think of themselves and of the actions that are open to them*” (Hacking 1981: 15-26).

## **Foods remain, values change: from producers to consumers**

In India, consumption patterns have altered dramatically over past decades, migration within the country for professional purposes have been profuse and income growth has been substantive, leading to changes in food value chains, consumptions and diet patterns. Change in consumption patterns emanate from transforming food value chains (FVCs), nestled in critical cultural components. Only a few decades ago, most people in developing countries lived in rural areas and worked in agriculture. A large share of food was grown for household consumption and sold in nearby markets (Gómez et al., 2013). Today, in contrast, the share of food reaching consumers through longer FVCs including multiple segments (e.g. processors, wholesalers) has increased dramatically, because of changes in food consumption patterns prompted by rapid urbanization, income growth, and expansion of modern retailers, processors and distributors. Increasingly, an expanding urban population and middle class are utilizing modern supermarkets and are diversifying their diets. The demand for products such as meats, dairy, fruits and vegetables is increasing. In addition, the market for

processed/packaged food categories is expanding, including breakfast cereals, confectionaries, ready-to-eat meals, and carbonated sodas, among others (Hawkes and Ruel, 2011; Goldman Sachs Group, 2007). At the same time, many rural residents depend on FVCs for their food intake because most of them, including the poor, are net-food buyers and are employed in the food sector (Barrett and Dorosh, 1996; Byerlee et al., 2006; Seshan and Umali-Deninger, 2007; Ivanic and Martin, 2008).

In traditional FVC consumers followed long lived patterns and most often purchased food directly from smallholder farmers and traders, in regional and local wet markets, or from a network of traditional retailers that included independently-owned, ‘mom and pop’ corner stores, street vendors, or roadside stands (Reardon et al., 2010; Reddy et al., 2010; Gorton et al., 2011; Ruben et al., 2007). Product availability in these FVCs was largely seasonal, small rural markets located relatively close to production regions. Traditional FVCs helped micronutrient deficiencies by enhancing access to fruits, vegetables, and livestock products in rural areas and in lower income neighborhoods in urban areas; they also reduced undernourishment, primarily in rural, remote markets, by facilitating access to staple foods. Modern-to-traditional FVCs, on the contrary, give food manufacturers the leverage to extend processed/packaged products into remote rural areas and urban neighborhoods where residents have little or no access to modern supermarkets. In the rural societies, traditional food practices particularly breakfast and snacks get replaced by processed food which often jeopardizes nutritional success. But this type of FVCs offers opportunities for collaborations among food manufacturers, donors and governments to implement profitable processed/packaged food fortification initiatives that target micronutrient deficiencies (Gómez, Miguel I., and Katie D. Ricketts 2013). The change over from production for family subsistence to cash earning involves individuals in the global industrial complex in ways often disastrous for their nutrition, as this study will demonstrate. Reliance on cash often erodes the old networks of reciprocal aid. People entering new occupations as wage-earners or as self-employed entrepreneurs tend to find themselves more isolated. Indigenous social systems may use wide-flung kinship networks for risk-spreading mechanisms in face of local drought or famine. But these important support systems turn out to be



vulnerable to change and to atrophy when rural development takes place. Some of these issues also emerged strongly from the case of Sundarbans.

Increased migration within large countries such as Brazil and India, particularly to the peri-urban and urban areas from rural regions, is leading to changes in dietary patterns as well as in diet-related chronic diseases (Popkin 2006). Migration within countries is believed to affect diets of the migrants and the diets of their communities of origin and destination; however, the causes and dimensions of such dietary changes are poorly understood. As I explain later in case of my study area, Indian Sundarbans, migration is an inherent feature of the region (World bank 2014) – particularly to distant parts of the country with large differences in cultural and dietary patterns. There are clearly other crucial determinants of the nutrition transition, along with the shifting role and impact of the food industry, household technology, women's roles, and knowledge and attitudes related to food (Popkin 2002).

Changes in income per capita at the national level do not necessarily translate into short-term improvements in diet or nourishment as the NSSO (2014) data on India has already demonstrated. Obviously variations in the distribution of income, how it is spent, and other factors mean that improved national income, despite increase in improving purchasing power for the poor, does not lead to improved diets for the most needy households. Behrman and his colleagues (1988) argued that increased income does not affect quantity of diet; their analyses focused primarily on short-term effects of income on energy and protein intake, which quite corroborates NSSO findings (2014) over 25 years later. However, what has not been recognized is that concurrent changes are occurring in nutrition with equally important resource allocation implications for low-income countries such as India, in their policy and governance of public health. The pace of dietary change has accelerated without substantial nutrition transitions for the marginal population, as evident from the NSSO data, which underlines no substantive increase in protein and energy intake despite rising incomes, however, an increase of fat intake has been noted. Some of the drivers are explained in the following section.

## **Coke in country roads: Food choice transformation in rural India**

In India, as Deaton and Dreze (2009) show about 10 percent decrease of calorie intake over the two decades (between 1983 and 2004) where the real average monthly per capita expenditure (MPCE) increased substantially (about 22 percent in rural areas in India) over the same period (Basu & Basole 2012). A change of pattern over the food expenditure has been observed among rural and urban poor who have reduced expenditure in essential food items, at the expense of non-food items. Changes in consumption habit that declined “*home grown consumption*” and led to “*diversification of diets*” (Basu & Basole 2012, Rao 2000, Mittal, 2007) have not quite helped alleviate malnutrition in rural India either. Even public policies and nutrition schemes such as mid-day meals in schools have failed to achieve the desired success while managing to homogenize the idea of meals, creating certain state-sponsored meaning about ‘meals’ at one end of the spectrum while debunking local knowledge and requirements about nutrition, traditional values and understanding of food on the other. A slow but steady diversification of diets, in both rural and urban India has been noted by several scholars (Rao 2000; Mittal 2007) without really identifying their nutritional outcomes and rationalizing making of such choices, prior to the work carried out by Bose & Basole (2012), Dreze (2009) and the NSSO (2014).

Apart from diversification of diet, rising expense in non-food articles and ‘stagnant real food expenditures’ accounted for calorie intake declines, diversification of diets implied substitution of cheaper with more expensive sources of calories, e.g., rice and wheat with vegetables, nuts and fruits (Basu & Basole 2012). Choice of food and compulsion of increasing expenditure over non-food, ‘essential’ (rent, health, transportation and communication) ultimately resulted in cost cutting over essential food items, which are being treated as the “*residual item of consumption*” (Sen 2005). NSSO data reveals rapid, multidimensional transitions and transformations in dietary patterns with negative nutritional outcomes (despite rise in income, higher ‘food’ intake and programmes such as mid-day meals). The yet unsolved problem of malnutrition must thus be deconstructed in accordance with regional & community knowledge for foods, culture, ecology and society that determine demographic and behavioural patterns;

‘good nutrition’ for addressing malnourishment problem cannot be expected from external sources. This work will connect food cultures and choices to malnutrition in the larger perspective of socio-economic changes this work will provide policy directions and tools. Despite the clarion call of Douglas & Khare (1979), anthropologists still seem to be trapped in the nostalgia for the past over ‘tradition of culture’ without examining and focusing on processes of development and the drivers that determine its outcome across transitional societies. Nutrition, as mentioned in the post-2015 SDGs, is a critical domain where anthropological assessments can bolster development by targeting policies, aids and programmes, assist delivery and health systems, enhance quality of life and ensure equity, justice, choice eventually leading to a sense of freedom (Sen 1999).

### **Agenda post 2015: SDG & nutrition**

The year 2015 marks beginning of a new development regime for the globe that underlines expiration of the Millennium Development Goals (MDG) coined a couple of decades ago. However, the newly coined Sustainable Development Goals (SDGs)<sup>5</sup> are clear in their objectives of fulfilling the global obligations towards unmet MDGs and taking them forward with additional targets. The second of 21 agendas under SDG, immediately after the overarching target of poverty reduction, pledges to end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls. However, achieving this pledge necessitates engendering better understanding of nutrition and its drivers that not only includes food cultures and choices but also situates them in the larger perspective of socio-economic changes and demographic shifts, politics of food and role of agents such as the media (Popkin 2006). Success in achieving the desired nutrition standards is also significantly vital because it would determine outcomes of many of the other 20 SDGs targeted in the next 15 years.

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<sup>5</sup> <http://sustainabledevelopment.un.org/sdgsproposal>

## Indian Sundarbans: 'Location and dislocations'

The Sundarbans is an archipelago of 102 islands located in the Ganga-Brahamaputra-Meghna delta in the mouth of Bay of Bengal, surrounded by protected forests which is the habitat of Royal Bengal Tiger. The UNESCO world heritage site spread across approximately 10,000<sup>2</sup> km across India is also world's largest contiguous mangrove ecosystem and forest. Of all the islands, 54 are inhabited with some of the most impoverished population. The region is traversed by a intricate web of rivers, rivulets, canals and swamps, some of the islands are very difficult and take inordinately long time to reach by surface transport despite their physical proximity to the mainland. There are seven main rivers in the region, which, from the east to west are: Hooghly, Muriganga, Saptamukhi, Thakuran, Matla, Bidyadhari, Gosaba and Harinbhanga. The Harinbhanga also marks the international border between India and Bangladesh. These rivers are extremely erosion-prone and particularly during the high tides as well as during storm surges and cyclonic storms they tend to flood the land around (Rudra 2014).



**Figure 1:** Daily commuters at Bally *ghat*, Gosaba, on their way to work or home

After the region was depopulated by a host of reasons ranging from climatic, environmental and man-made such as attacks and loot by Portuguese and Dutch pirates (O'melly 1990, Anon 2009). The British settled people in Sundarbans with the help of local landlords and as mentioned earlier (see section selection of site), it led to a population mix of tribal communities from central India, people from adjoining districts and from Bangladesh (then undivided India). The islands as well as coastal regions are embanked not to allow the saline water to ingress the soil and destroy agriculture. The British in their early periods of colonialism, started constructing the embankments (about 150 years ago) realising that without these structures, no human settlement was possible in the region (Danda 2007, Chakrabarty 2009). The embankments today run up to 3500 km along the coast of Sundarbans and according to the local narratives, breaches in these embankments have been a regular risk which the villagers have lived with. Such breaches inundate agricultural land and destroy mud houses, and are perceived by the villagers as the greatest threat to their physical security.

The administrative area of the region is spread across two districts, the South and North 24 Parganas and comprises 19 sub-districts – 13 in South and six in North 24 Pargana district. Some of the sub-districts have land connections up to Kolkata, some sub-districts are entirely island blocks while a few blocks consists of both islands and areas connected to the mainland. The region spans from the south-west to south-east parts of the state of West Bengal. The region also shares international borders with Bangladesh both through land and water.

### ***'Zero point epistemology'***

The Indian Sundarbans is a complex socio-ecological system characterized by high level of poverty (Anon 2010, Ghosh 2012, World Bank 2014), largely natural resource based livelihoods (Danda 2007), a variegated societal structure that includes various castes, creeds and communities such as Hindu and Muslim including a sizeable tribal population (Bera & Sahay 2010). Today the population of the region is about 4.5 million (Census of India 2011). The region, largely depopulated according to the description of British surveyors (Hunter 1876), was populated again by the colonists through next 100 years or so. Almost the entire population of the region thus comprises migrants from central and eastern India;

there is little, if any, indigenous population of Sundarbans. Because of the interactions and contestations of various sub-cultures currently under the aegis of and subjected to the dominant development paradigm, further complicated by high outmigration to different parts of the country in search of livelihoods and economic security, this locale offers a policy challenge to configure and bolster health as both social and human capital.

There are various contesting constructions of the region that has emerged since independence of India, the dominant framing is that of a wilderness, a tiger reserve and a mystical forested region brimming with biodiversity including the tigers (Jalais 2014). An anthropologist, Jalais claims that the people consider themselves as mere ‘tiger-food’ – such framing finds support from popular literary fiction such ‘*The Hungry Tide*’ where the author, Amitav Ghosh, presents a similar tension between ‘location and dislocation’ (White 2013), between western gaze and lived experiences of people in what he describes as the ‘*tide country*’. Aware about his simplistic or rather idealistic syncretism between worlds of knowledge, he claims his prose to be an entry point to environmental activism towards at least the recognition to a more humanistic understanding of the region. This view, however, receives a scathing attack from conservationists and biologists, some of the radical ones even demanding depopulation of the region (Ghosh 2014, in Pelling eds 2014) to restore and converse the ecosystem. This study is however, veers clear of the constructional contestations and focuses on people as residents. However, it fails to chart an ecologically independent trajectory of inquiry as ecology intersects the culture and the society (already in a mutually interplaying relationship of evolution) much too frequently, in a mutually inseparable existence, what Ghosh (2005) describes as reimagining nature to restore human presence in it, as one of his protagonists in the novel says: “*River runs in our veins*”.

### **Demography & ethnicities: Uniquely poised**

The decision of covering different regions in my ethnographic survey (as opposed to carrying out a deep description of one village) was to cover the amazing diversity of the region in terms of communal heterogeneity. Sundarbans is truly a microcosm of a representative Indian society where people of diverse classes, ethnicities and cultures share a common resource pool of the region. The unique

cohabitation of different cultures and ethnic groups make it important to obtain samples from different communities, living across different parts of the region. For example, islanders have different healthcare concerns compared to mainlanders and need to be addressed differently. Certain tribal communities, despite being poorer, have better levels of nutrition as they eat a variety of meat such as pork (which is much cheaper than the more culturally widely accepted goat or lamb meat). Poverty in their cases, however, leads to other kinds of health maladies such as lack of vegetables or milk in their diets which have to be purchased from the market. At the same time, people of Sundarbans – despite their differences in caste, culture and creeds have evolved a hybrid culture where boundaries of each other’s culture get blurred. For example, despite different communities all having their own languages, all have adopted the Bengali as a common language (Bera 2010). Even in religion, deities show a remarkable amalgamation – the *Bonbibi* and *Dakshin Roy* – the protectors of forest dwellers are perfect examples of how even faiths have crossed boundaries that are otherwise considered sacrosanct (Jalais 2014). Islam prohibits both idol worship and women deities that the *Bonbibi* manifests and this ‘cultural mingles’ (Bera et al, 2010) make the Sundarbans’ local culture a unique one.

### **Poor but not famished: Socio-economic profile**

The settlers by the riverside in Sundarbans mainly depended on fishing while the mainlanders prefer agriculture. The economy, however, is subsistence – most of the agricultural and fishing products were consumed locally because of lack of transportation, storage and marketing facilities (Ghosh et. al 2015). Majority workforce was marginal daily wage laborers who worked both in agriculture and fishing (Ibid). The forest provided an opportunity to supplement the income during lean agricultural seasons as most part of Sundarbans is mono-cropped (Danda 2007). The forest produce or the non-timber forest products (NTFP) included collection of tiger prawn seeds or ‘*meen dhara*’ carried out particularly by women and catching crab (Jalais 2007). In addition, under NTFP honey provided an important source of income where a large amount of people is engaged. However, increasing fragmentation of land, frequent extreme weather events such as cyclones, rising salinity and environmental shifts have forced the



populations to seek alternative livelihoods. Outmigration rate is spectacularly high in the region (World Bank 2014) and people travel to different parts of India and



**Map 2:** Sundarbans and Kolkata; field sites circled in red

Courtesy: Sunderbans Tiger Reserve, A Journey Through Time And Tide <http://wp.me/p5K0uK-n>

the globe in search of livelihoods.

The poverty rate, according to last available data, is very high in the Sundarban region as mentioned in district Human Development Report, West Bengal South 24 Parganas, 2010. About 44 per cent of the population lived below the poverty line and they did not have even access (60 per cent of the households)

to clean drinking water. About 87 per cent people lived with some sort of food shortage – food insecurity was high (Ghosh 2012). However, in the recent times, improved transportation and remittances have improved economic conditions overall. Concrete houses, in various stages of construction, could be seen across the region which locals said mainly identified migrant families. Overall, with an increase also in the tourism, there is more liquid cash in the region. Migration has left a void in the human resources, which offered better economic opportunities for locals. However, it was also pointed out by the local administrators that a large part of the economy was fuelled by illegal or illegitimate activities such as arms smuggling because of its porous borders with Bangladesh and abundant waterways which made such activities easy to operate. Petty crimes such as cultivating cannabis also fetched good price which has been reported from the region (Basu 2015).<sup>6</sup> Also federal schemes of income guarantee such as Mahatma Gandhi Rural Employment Guarantee (MNREGA), implemented from 2009 in the region has helped marginal families to have stable income even if crop fails or there is no other work. All respondents agreed that the economic conditions were better now.

## **Lay of the land: Sub-districts and Villages surveyed**

The sample size for the survey was 10 households in each of the four sub-districts (lowermost administrative unit in West Bengal just after villages), Pathar Pratima, Gosaba, Sandeshkhali I & Sandeshkhali II (see Figure 1 for locations). The villages where the survey and focus group interviews were carried out were Kedarpur, K-Plot and Paschim Sripatinagar in Pathar Pratima; Bally and Lahiripur in Gosaba; Boyermari, Dwarir Jongol in Sandeshkhali-I and Khulna in Sandeshkhali-II. All the regions are entirely rural and mostly islands.

### **Pathar Pratima:**

Situated in the south western part of South 24-Parganas with the main river *Thakuran* on its east, and Bay of Bengal in the South, this sub-district consists of quite a few islands and also areas that are connected to the mainland. Despite the land connections, the transportation network is very poor and reaching Kolkata

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<sup>6</sup> Anandabazar Patrika, October 29, 2015 <http://goo.gl/k2c9Ah>.

from most parts of the sub-district, especially from the islands, is quite difficult even during the day. A direct train runs from Kolkata to Kakdwip or Namkhana, which are nearest points to avail local trains. From the railway station one has to walk for about 15 minutes – which is challenging in hot summer or during monsoon – to get to overloaded private buses where people, animals and luggage are all dumped together. Otherwise mechanised wooden vans or cycle-vans can be hired to reach (at a higher fare of course) the jetty from where *bhutbhutis* – a boat fitted with a makeshift diesel generator that acts as the motor for the boats ferry people to different islands. These boats are overloaded even during norwester season or monsoon with a high risk of capsizing, which also happens frequently and claims lives. The distance from Kolkata is 120 km which takes more than five hours to travel if all connections are available on time. Here, I conducted my interviews in the village of Kedarpur which has direct land connection with the mainland though little or no transportation. The other village studied was K-Plot, on the other side of the river which required crossing a ferry, which operates once every half hour – only between 7 am and 6 pm depending on availability of passengers.

### **Gosaba:**

The Island of Gosaba is historically famous as the first organised socio-political system of governance in Sundarbans was instituted here. A Scottish entrepreneur, Sir Daniel Hamilton, purchased the island from the British administration in the beginning of 20<sup>th</sup> century and instituted his command, control and rule, to the extent of even a separate currency. This island block is situated south eastern part of South 24 Parganas at the mouth of river *Matla*, one of the important and main river of the Sundarbans. This block is also located in the buffer zone of the protected forest and the tiger reserve. There is direct road connection from Kolkata (about 100 km) to Godkhali and Sonakhali – two entry points to Gosaba – from where the ferry service carries passengers to different parts of the sub-district. Despite the proximity and the road connection, there is no state transport service to the jetties of Godkhali and Sonakhali depend on private buses or cars for traveling by road. There is a train connection from Kolkata to Canning, which is in a slightly different direction but serves the only option for people living in the islands. A





**Figure 3:** Commuters approach Godkhali *ghat* during rains. Note the umbrellas covering the entire boat. The daily journey for passengers is all but dangerous and risky.

train ride from Kolkata takes about an hour to reach Canning from where one has to again avail private buses, auto-rickshaws and machine vans to reach the jetties of Godkhali or Sonakhali, which takes about one and half hour.

The *bhutbhutis* which connect different parts of the block, lack even basic safety parameters and are always overcrowded and overloaded. These boats do not have any shade so during rains passengers have to use their own umbrellas which makes navigation even more challenging by blocking the vision of the boatmen. The frequency of service range from every 30-45 min and run only till 7pm. Every ferry, in the peak hours carries about 70-80 passengers (on average) (against its capacity of about 30) and in other times of the day about 30-50. The boats often wait for more passengers to congregate so they can save on fuel and make a greater profit, as the cost per passenger is merely ₹4 (about ¢5). From Godkhali, one has various points to alight to. For some islands, ferry services need to be accessed from different jetties located across different islands. For example, to travel to Satjelia or Lahiripur villages, one has to reach Dayapur *ghat* (makeshift jetty) by cycle van or motor-van (a hybrid between motor cycle and cycle rickshaw) that takes about 45 minutes through bumpy and unsafe roads. Dayapur *ghat* is much

more primitive than the Godkhali *ghat*, and appears more of a death trap for the unaccustomed passengers.

In Gosaba, the individual and focus group interviews were conducted in the island village of Bally, which can be accessed from Godkhali by a long-haul ferry service which operate three times a day, to and fro, in the morning, then once in the afternoon and then just before dusk. The travel takes about an hour and a half on way. Otherwise one has to change two short ferries and reach the village through land, which takes longer and the poor road condition makes the ride in engine vans or cycle vans a treacherous one. Majority of the respondents said that they preferred the long boat ride as it was at least less strenuous, but every now and then they had to access the other route as well in the times of urgency or emergency or even an unplanned, unscheduled travel. The other village of study was Lahiripur that needed crossing over from Gadkhali into Pakhirala and then travel to Dayapur or Jatirampur ghat in cycle or machine van through narrow brick paved and often unpaved roads that may take up to an hour. Then one has to cross at Dayapur ghat to Satjelia and from there travel on a cycle van to Lahiripur which takes about one hour. The total time to reach Lahiripur is about five hours from Kolkata, surprisingly Canning is reachable in an hour, which is in Sundarbans. From Canning to Lahiripur, it takes about four hours which involves two boat rides and three road trips from Canning.

### **Sandeshkhali I & II:**

This sub-district is also located in the south-western part of the Sundarbans but northwards from Gosaba is under the jurisdiction of North 24-Parganas district beside the River Minakhan. This is the nearest sub-district of Sundarbans from Kolkata, just about 75 km by road. However, there is no direct train connection and the road route is served by state bus services from the centre of Kolkata which takes about four hours to reach the jetty of Sarberia from where one has to use the ferry service to reach the heart of the block. The ride from Kolkata is strenuous with poor road conditions and overloaded bus offering a bumpy, backbreaking ride. One would still be lucky to get a seat, commuters generally have to stand for long hours as well. Roads within the island are in poorer condition, they are not tarred but brick-paved on which engine vans and cycle rickshaws operated by the private

owners precariously carry passengers. Accidents are only too common, commuters reported. Sandeshkhali-II sub-district is located further to the east of North 24 Parganas with river Raymangal river on its east & Hingalganj sub-district on the north-eastern boundary. This region has direct connection to the mainland and despite the bridge on *Bidhyadhari* River that could have reduced the commuting time from Kolkata but poor road condition makes the journey much more painful for the daily commuters, who prefer using the river route. The field survey was conducted in Boyermari village in Sandeshkhali I and Khulna village in Sandeshkhali II, both islands, the former had to be accessed by crossing one river while reaching Khulna from mainland involved crossing the river first to Sandeshkhali I, then travel by road for about 45 minutes and then crossing the river again, followed by road travel for another 30 minutes.

## The Ethnographic toolbox

Quantitative data was only used to identify the research site and prevalence of malnutrition as it is important to provide a strong justification both in terms of actual occurrence of the condition under investigation and criteria that constitute the ‘puzzle’ of malnutrition in societies in transition as described earlier. Large-scale representative sets of data in a numeric form (Blaxter, Hughes and Tight, 1996) help identifying

merely the location, largely for pursuing detailed, qualitative study. As this research is focused on food culture that demands understanding evolution of food habits in societies, human aspiration and



**Figure 4:** Mothers in Sandeshkhali I just before started our interview

value of food, it aimed to achieve ‘depth’ rather than ‘breadth’ (Blaxter, Hughes and Tight, 1996: 61). Here data, numerical values and statistics can only provide a

limited or even skewed understanding and can often become misleading as both the process of data accumulation and representation are often questionable. So “being there” (Roncoli et al 2009) was much better suited for this work to reveal how food choices and culture was shaping on the ground. Cultural realities would elude if the researcher did not engage with the daily lives of the subjects and their narrations, which are impossible for structured survey methods to represent (DeWalt and DeWalt 2002; Jorgesen 1989; Shensul et al. 1999).

Qualitative research aims at understanding issues or particular situations by investigating the perspectives and behavior of the people in these situations and the context within which they act. Conducted in natural settings and using data in the form of words rather than numbers, this method lays importance on the deep-seated understanding rather than mere numerical legitimacy. Qualitative data are gathered primarily from observations, interviews, and documents, and are analyzed by a variety of systematic techniques. This approach is particularly useful in understanding causal processes, and in facilitating action based on the research results. This research was conducted with the help of local community members, health workers, members of civil society who personally know the households and have knowledge about their social conditions, concerns and aspirations; in short the socio-cultural dynamics. This research thus attempted to engage with the everyday experience of people to uncover their predispositions and preoccupations, methods employed in this research comprised:

- A) Snowball sampling
- B) Semi-structured expert interviews
- C) Focus group Interviews
- D) Semi-structured qualitative interviews with sample population
- E) Ethnographic observations in primary health center,

**Snowball Sampling & Semi-structured interviews:** The initial identification of the households for the qualitative interviews was carried out through snowball sampling (Noy 2008). One of the main selection criteria was presence of school-going children in the households, as this study is largely focused on undernourishment and changing food culture among children. It also helped to critically examine efficacy of government programmes such as mid-day meals. Interviews were conducted with school-going children, their mothers and teachers



(who were not part of school mid-day meal) to learn their respective interpretations. However, direct observation of consumption of midday meal in school was not possible as field visits coincided with the summer vacation in the school in West Bengal. But it did reveal how a gap, created during the holiday seasons, becomes even more difficult to plug, as has been observed during the pulse polio vaccination in India.

In all three sub-districts, I had key informants whom I contacted with the help of local NGOs, doctors and health workers. Before embarking upon the fieldwork, I met these informants, all residents of the localities where the survey was to be conducted, to discuss the research topic in detail. Their access to the households also helped me to get inside the 'kitchen' of families for discussion and open-ended interviews.

In Patha Pratima, Anshumas Das, a local NGO activist was my key informant, he was born and brought up in Herambachandrapur village in Pathar Pratima. After being educated in Kolkata, he started an NGO focused on health and education. In Gosaba, Lahiripore, my key informant Nirapada Sardar was a tribal fisherman who worked part time as a civil society volunteer and a local primary school teacher. We discussed to identify the households and Nirapada guided me to 10 households where I interviewed the members, mainly women. In Bally village, I was accompanied by Babu Mistri who worked part-time in a local wildlife camp and holiday resort, and had very good understanding of the changing socio-cultural dynamics in his village where he had grown up and lived his life. In Sandeshkhali my key informant was another tribal social worker Niranjan Sardar. He was very enthusiastic; we started our day at 5 a.m. and walked around villages entire days, to end only when darkness descended and ferry services would threaten to end for the day. His company was very helpful and he was very proud to describe his village to someone from a foreign land but was a Bengali nonetheless, so language could not dampen his enthusiasm. Surprisingly, the young boys from his villages were quite familiar with European football teams, from English Premier League, La Liga, Italian Serie A to Bundesliga; many of them could be seen sporting jerseys of Juventus, Real Madrid etc. They regularly watched these games in the cable television, they said. With the help of Niranjan, I conducted two focus group interviews in the tribal area as well as in the Muslim *para* (locality) in Sandeshkhali.

Interviews were conducted at different times of the day, sometime during cooking time at home, or afternoons ‘gossip-time’ under the cool shades of trees, courtyards, or riverbanks. Even co-passenger in ferries, whenever the travel time allowed, revealed many dimensions of food cultures. The interviews were conducted in a semi-structured fashion as it offered considerable flexibility to the respondents and who could point out to something that otherwise appeared out of context. They even highlighted some of the aspects of their food choices which were salient; otherwise it might have escaped my attention. These interviews were not being stacked and one-time but staggered and spaced over the entire period of field study. Efforts were made to cover diverse households as per their economic status and the capacity to aspire.



**Figure 5:** During a focus group interview in Sandeshkhali I with Muslim women

**Focus Group Interview:** Focus group interviews were conducted with the mothers, caregivers of the children in two villages in Sandeshkhali I where tribal and Muslim families lived next to each other. It was interesting to learn if they shared their food culture, so the focus group interviews were targeted at mothers and grandmothers of the children. The women were aged between 16 and 55 years and the group interview was conducted in the village courtyards, surrounded by

small *kuccha* huts, the place was a post-lunch meeting point for the tribal women. Second focus group interview was conducted in the same village with the Muslim women where young mothers were more enthusiastic in a group conversation and through contestations and consultations, many fascinating aspects regarding food habit changes. Each focus group interview continued for over two hours.

**Expert Interviews:** Public health experts, doctors, health workers, schoolteachers, heads of schools (as they are part of the nutritional programme called mid-day meals), officials in health sector NGOs were interviewed in Kolkata, at the sub-district and village level as well. Biomedical practitioners were found to understand the cultural nuances of food choices and consumption patterns by virtue of interacting with the populations on a daily basis. Many of them appreciated pronounced links between culture, food, aspirations, choices and nutrition. The health system in these remote villages typically consisted of, apart from biomedical practitioners, Ayurveda and Homeopath doctors and quacks, who played an important role in the health governance in the villages. People's trust and faith on these quacks was based on their familiarity with the villagers, knowledge about individual problems and medical history, their availability in the times of crisis. This could have been an interesting study in itself however, the current inquiry could not afford to spend much attention on it.

The other experts were Accredited Social Health Activists (ASHA) workers, *Anganwadi* worker, Auxiliary Nurse Midwife (ANM), who played the dual role of a social counsellor and a biomedical agent who interact and are supposed to assist, guide women about their health and nutrition, possible food choices and what to eat. ASHA workers are local level managers who visit every household in a village and are familiar with cultural practices and customs of food across different communities in the village society. These workers are also entrusted with the responsibility of counselling, educating pregnant and lactating mothers about nutrition and calorie requirements. However, being part of the government nutrition machinery whose incentives depended on their 'achievements' reflected through statistics that are collated at the village level, they often ended up talking about the governmental success in various nutritional schemes. The first set of expert interviews were conducted before proceeding to the

study area and also in between the fieldwork. Those interviews helped framing a structure of the qualitative inquiry at the household level.

**Ethnographic observation:** Ethnographic observation helped me understand the food, meal habits, choices of food, place, values, times and procurement of food, in those households, including cooking processes and rationale behind these choices, and also visits to local groceries, speaking to the owners to understand what kinds of food items were heavy in demand. The observations had two important parts, the first one was to be with the mothers and woman who procured raw materials and cooked meals in majority of the households. Their daily lives, routines, habits and choices



**Figure 6:** Rice and some fried potato for lunch, Boyermari, Sandeshkhali I

regarding food seemed important drivers in determining choice and subsequent nutritional outcomes of the entire family. The important issue of access (Sen 1987) to food items, capabilities (Nussbaum 1995) and as well as cultural drivers in utilizing these food items in the most efficient and productive manner was understood. The food habits in these societies also depend on seasonality because of non-availability of storage facilities such as refrigerators, which uncovered through interviews. Changes over choices were mapped as well through generations and a causative behind these changes, for example the media, was identified as a buffer agent behind these changes of choices of food. Gender dynamics in the consumption pattern is also an important matter needs to be understood. The second part of the observation included the children and their food choices, consumption habits at home with their families and outside with their peers. The exposure of these children to the media significantly impacted their food habits and though many children had a problem of articulating, it was important to observe them in various settings including outside home when they met their peers.

## Sniffing around: Changing flavours of Sundarbans

### Ecologically edible

Ecology and its products play an inexorable role to determine food habits of populations. However, a mixture of inductive and deductive reasoning associated with socially-oriented investigations of these systems is lacking on the ecological side (Epstein *et al*, 2013), which often even predates the practice of organised, industrial and commercial agriculture. In the Sundarbans, organised agriculture was started by the British (Hunter 1876) in the turn of 19<sup>th</sup> Century. With relative abundance of fish in the rivers and the seas (Ghosh 2015), populations living therein found a stable source of protein and vital source of nutrients. According to medical experts who have worked in Sundarbans for a long time, fish very soon became a part of the cultural milieu of the Sundarbans people, who would cultivate rice and eat it with some grilled fish with little or no oil. Because oil was not (and still is not) produced locally and has to be transported into the region from other part, it remains a precious commodity.

By ascribing importance to the overall collective experience and cultural framing, anthropology endures the folk narratives of main food in the local culture, (Roncoli *et al* 2009, emphasis added) – which in Bengali culture has evolved to be ‘*machey-bhatay Bangali*,’ meaning ‘the Bengali is nourished by fish and rice.’ Expanding the meaning beyond the narrative spheres, combination of protein and carbohydrate sources were both very vital for meals and also developed the food preferences, meeting ecological design of their land. Fish was an essential, easily and freely available (at least up to mid-1980s fish) and an irreplaceable food in the diet; providing the poor a vital source of protein and helping tackle deficiencies in vitamins A & D and minerals. The fish meat supplied considerable amount of glycogen and free amino acid, rendering their flesh sweet and tasty (Nayak *et al* 2014) for the population. In Sundarban however, importance of fish was even greater. As per local and expert narratives, the difficult terrain did not allow easy transportation of spices, oil or even fruits and vegetables – none of which was historically available in the region and needed to be transported by road or through rivers. This led to dependence on fish and rice in the diet, both available and

produced respectively in the region. Women or children could easily catch fish or crab abundant locally. According to experts, consumption of fish supplied essential amino acids which in turn also helped absorption of other nutrients in the body.

Also, most of the sources of catching fish was part of the commons, locals could fish in the brackish waters and rivers, without bothering for licenses and permits from the government. This meant that catching and consuming fish did not need any payment or expenses, apart from the physical effort. However, with the Wildlife Protection Acts in 1972 and the Forest Conservation Act 1980 forest, rivers and seas – a majority of the commons – was pushed out of bounds for the locals. Most of the commons were brought under government control and ownership. Now, to consume fish, it had to be bought from the market, which was available for free earlier. For the communities, fish was a freely available food item, integral to their diets, which probably was never ‘valued’ as a ‘commodity’ that now had to be purchased from the market.

Experts and locals suggested that the problem to a large extent was also ‘man-made’ apart from the state’s control. Working as a fisherman was far less prestigious socially than working even as a wage labourer in the paddy fields earlier (Danda 2007) but the open market economy attached a greater commercial value to (by exporting) fish (Chopra et al 2009). It is important to mention that when large landholders started losing control of their lands as the Government started redistributing land-leases to landless farmers, many of the large landholders transferred their agricultural land to *farm* plots where they could retain their ownership, and started organised aquaculture (Rahman et al 2010, Gain et al 2014). Fish in the commons such as rivers, sea or brackish waters and in *Bheris* (local name of aquaculture ponds) were more profitable to sell in the global food chains than consuming themselves. Even if cash or surplus income were available, people did not want to spend money on something that was once so freely available. According expert narratives, the gap thus created was never filled up or was addressed by the State because the alternatives – including pulses, vegetables and fruit – were all more expensive. However, the private food corporations and enterprises targeted this gap with their processed and packaged food, which will be explained in [later sections](#). Also, a sharp decline of fish owing to pollution and that

a catch was now dominated by trash fish in the commons (Raha et al 2012) which further reduced the chance of having a quick fish-meal for the local populations.

The other ecological factor that has played an important role in the recent times – increasing salinity of soil with sea level rise and geomorphological changes in the region (Banerjee 2013). An altered salinity profile has forced a change in the kind of crop grown by making agriculture difficult. Many crops had to be discontinued that were abundant in the region such as watermelon (Ghosh 2012). Locals highlighted certain other crops such as pulses, chillies and some vegetables, which could no longer be cultivated in the region as well. This has reduced the availability of locally produced vegetables and food grains. Agriculture in Sundarbans is traditionally mono cropping because of the terrain and climatic conditions such as availability of sweet water, possible only in monsoons (Danda 2007, Ghosh 2015, Anon 2010). If a crop fails in the solitary season, people are left with little option but to buy it from the markets. The environmental shift thus increasingly transgressed the socio-cultural domains (Pelling eds 2014), in this case through altering meal structures, which left a need gap that was required to be filled.

### **When tides turn ‘hungry’...**

Sundarbans have regularly been struck by extreme weather events such as cyclones; however in the recent times, smaller extreme weather events such as Perigeon spring tides and subsequent floods have become increasingly common that cause equal destruction (Ghosh 2015). The biggest disaster in the recent times was *Aila* in May 2009 and subsequently, there have been two localised smaller disasters, one in 2014 in the form of Perigree spring tide flooding and again this year 2015 July in the form of floods caused by heavy rains. Every time there is an extreme weather event and villagers incur losses from crop damage because of inundation of agricultural fields or structural damages to the dwelling units, they are forced to sell the cattle, which act as a buffer capital, which is common in poorer regions across the world (Ulrich 2013). However, the externalities of selling the cattle or the farm animal take a toll on the daily diets, milk and eggs in particular disappear from meals. In Bally and Khulna – both coastal villages – families claimed that after selling their cattle, hens and ducks the children were



denied of milk and eggs. Scarcity of milk was the most incriminating for the children, complained the mothers across villages, as there was no formal milk supply network in the Sundarbans. The household cattle were the only source of milk in the region. Even in 2015, six years after *Aila*, villagers said that they were not able to save up enough recovering the losses, to reinvest in cattle.

A poignant scene unfolded in front of this researcher in Pakhirala village, Goasaba block in 2014 August during scoping of this work. A woman and her husband were selling their four goats, including two kids, immediately after the Perigean spring tide, which had decimated their dwelling unit entirely and the duo was to rebuild their house again. The elderly woman in her 50s was inconsolable during the negotiations over price with the buyer. She said that she had no other alternative but to sell these animals to rebuild their house and lives after the disaster. She said the goat provided milk for her grandchildren who were three and



**Figure 7:** In Pakhirala, Gosaba, the couple who had just sold their goats and kids, and was trying to rebuild their house that was completely destroyed in the Perigean tide flood

four years old respectively and the milk was their main source of nutrition, as they could not digest cow milk because of premature birth. Her grief was palpable, as she feared that her grandsons would now suffer more than the adults in absence of milk. After *Aila* cultivation was not possible for two subsequent years and just

when it had resumed around 2012-f years. Because the economy is subsistence (Ghosh 2015a), loss of season's crop, particularly rice, affected population in their diet. However, it must be mentioned here that poverty or paucity of resources did not seem a dominant driver of nutrition as almost all the households surveyed barring an insignificant section (two out of all the households), claimed that they could afford two square meals a day and there was no shortage of food. It might indeed appear strange in a region with high level of poverty where natural disasters destroy crop at striking regularity would not suffer from food shortage or a problem of food. But high seasonal outmigration of people – not only to other parts of the state but also to distant parts of the country (Ghosh 2012, World Bank 2014) and abroad ensured a steady flow of cash to the households. While migration helped households meet the expenses and supplied additional cash to the households, rampant migration also left households with psycho-social trauma and stress which mostly affects the children, women and the old which in turn affect their food intake. Even expert narratives stress on the fact that in households where both parents migrate leaving the children with the grandparents, the children suffer various psychological stress which lead to adverse effect on their nutritional status (Ghosh 2015), which will be explained in the following section.

### **The Unholy Trinity: Migration, mental health & malnutrition**

Widespread outmigration has become a regular feature across households in Sundarbans – particularly among young men. Earlier studies have highlighted a very high rate of seasonal migration, particularly following disasters, in households (Bera 2013, O'Donnell & Wodon 2015). Respondents narrated a host of reasons behind their decision ranging from frequent disasters against which they had little resilience, shrinking livelihood opportunities in the region where gainful employment was scarce and constant threat to natural resource-based livelihoods; as well as an allure of a better life.

This study found a new trend in the household migration, which is just beginning to be reported in the media (Ghosh 2015) with little or no academic analysis. During the snowball sampling many households were found where both the parents had migrated out in search of livelihood leaving young adults, sub-

adults and even children behind. These children were mainly in the custody of either the grandparents or were sent to hostels where they lived rather solitary lives. According to an administrator of one such hostel, these children were largely either depressive or aggressive – making the task of controlling them difficult. A rapid increase in the number of such hostels was also notable as more parents sought such services. Typically, these children spend vacations with their grandparents or at home if their parents visit. However, majority of these migrant parents worked in factories as unskilled labour in different parts of the country ranging from Kerala, Tamil Nadu, Gujarat, New Delhi and Andaman Islands. Factory holidays for these unskilled workers were very few and often these did not match with school holidays anyway.

Grandparents claimed that the parents of the children could only visit once in two years. Sometimes the children could visit the parents which however was highly uncertain and depended on the saving the parents can make.

While paying hostel fees was also a problem for many parents, grandparents had to play a pivotal



**Figure 8:** Young men and women are migrating out in large numbers from Sundarbans, often even taking a lot of risks that become stressful for both parents and children.

role as the caregiver despite their age and frailty. However, the children probably suffered greater stress, being forced to fend for themselves with little emotional and psychological support. Doctors at the local clinics in Gosaba and Pathar Pratima claimed that the number of young and sub-adults who reported depression had increased sharply over the recent years, which was also reported in the media (ibid). This, claimed the doctors, did not only affect the appetite of the children but also harmed their digestion process. One of the doctors said that because of lack of parental supervision, the children often ate food which were not nutritious but

merely tasty. Ready availability of pocket money with these children, since their parents send money often directly to them, also allowed them to buy their choice often the packaged and processed fast food, even spurious or clone brands which were common in the region. The psychological stress also affected nutrition, felt many doctors. According to one such narrative, a doctor claimed that the children who lived with their grandparents often try to find solace and comfort in television, which harmed them in two distinct ways. First, it killed their appetite with constant exposure to TV and secondly it exposed them to advertisement campaigns of various kinds of fast food, alluring them to such products, which have little food value or nutrition but looked attractive. “I have found that many of these children just sleep while watching television and do not even consume a proper meal. Even when they do, the attention is on the television which hampers the digestion process,” said a doctor who runs two weekly clinics in Gosaba.

Depression in general had direct correlation with nutrition, said the experts. While the number of children on psychiatric medicine spikes, their nutritional status gets worse. Also, doctors said that the psychiatric medicines were rather strong which needed extreme care in handling and administration because they may lead to side-effects involving loss of appetite and drowsiness. The doctors said that they had to be extremely careful in prescribing these medicines and had to ensure that there was a responsible adult in the household to monitor,” said a doctor in Pathar Pratima. The hostel manager said that they never allowed residents to consume psychiatric medicine because it was impossible for the hostel authorities to monitor administering of such medicines. These children are often



**Figure 9:** A grandmother cooks for her grandson who relentlessly watches television. The boy's parents work in Delhi, father as a car-washer and mother as a domestic maid.



described as the ‘new-age orphans’ by the local people, the manager said, and was fast emerging as a major concern.

Four other families had migrant workers among the sample where both parents had migrated. In one such case the daughter was left in the care of the grandparents. While the couple had taken their elder child, a boy, along with them and the family worked in the Andaman Islands. The six-year-old daughter was sad all the time, said her aunt who was also newly married to the girl’s uncle. The aunt was just 18-year-old herself and was visibly uncomfortable with the responsibility of her newly-found niece. The girl, said the aunt, was almost on her own as she neither could confide to her aunt or to the grandparents. The girl went about the village alone and to the neighbours during social events and festivals, also went to attend her tuition classes by herself. The aunt said that the girl did not have much appetite and often dozed-off while watching the television in the evening, after she returned home from the school and tuition classes. A nine-year-old boy in Kedarpur said he desperately longed to be with his parents who lived in Delhi. He had also visited the city and hated living in this ‘primitive’ village. The neighbours claimed that he was left behind more as a token custodian of the family house and land it owned.

### The “Postmodern Palate”: *Mama bhujji & Pepsi-rolls*

The bright-red small triangular, fluffy packets appear strange to the urban eyes and one gets confused further as the children in the region tell you that it is



**Figure 10:** The *Mama-bhujji*

called *Mama-bhujji* while the packet reads *Wai-Wai*, a brand of instant noodles. But the portions are way too small to be instant noodles, so what could it be? In Indian language *Buji* means salty snack. I buy one, which costs just ₹1 (¢1.4), most children would have this amount or even more for their pocket money. The contents baffle me even further, it is nothing but dried, instant

noodles, just crushed a little more, profusely spiced-up and consumed as it is. The local varieties of *chanachur & dalmut* – quintessential lentil-based fried Bengali & Indian snacks similar in look-and-feel but produced locally with other natural

ingredients such as peanuts, roasted gram etc – have been convincingly replaced. A *Mama-bhuji* has to be accompanied by a Pepsi rolls, the children would tell you, which has little to do with the global food giant Pepsico except fostering the yearning for the beverage that led to production of these ‘rolls’ with the name that probably serves the purpose of cloning. Pepsi’s poor cousin does not come in a bottle, but in long, slim a plastic pouch. It contains sweetened, coloured, and flavoured iced water, one has to cut through a corner of the plastic pouch and suck the contents slowly. From the quality of water, flavours added to even nature of the plastic (food safe or not) used to make the packs are of dubious quality. So is the *Mama-bhuji*, which local women convincingly said, was made of *bason* (gram flour) or potatoes, however, the contents on the pack did not reveal anything similar. It was just spiced dry noodles, with added preservatives.

The food world of children in the rural India has been invaded and conquered by the global food giants, either by their own products or by creating a craving and longing for such products, which then is exploited by local companies with spurious, substandard, look-alikes that are cheap and never go through any quality checks. But just what the local mothers felt about them, why did they allow their children to consume these products? Did they think these were beneficial for their ward in any way, or it was just convenience?

Mitali was a mother best-equipped to resolve my quandary. She was educated (up to grade 10<sup>th</sup>), enjoyed financial security and travelled between the local towns and her village. She claimed with considerable pride that the majority of the village women, being unlettered and less educated than her, did not realise how important it was to feed children instant noodles, such as *Maggi*, everyday. Already pregnant a second time, she said that she offered *Maggi* to her son everyday, as it was extremely nutritious. She had shifted out of the village a few years ago and returned to the village during her second pregnancy. She had been living with her son in the local small town of Baruipur, located between Kolkata and the Sundarbans, while her husband continued living in the village to supervise cultivation of the family land and also worked in the tourism industry. Mitali (the woman) and her son had been living in Baruipur since past couple of years when the boy started attending school. Mitali proclaimed that she had to buy instant noodles, potato chips, chocolates and many other kinds of fast food in bulk for her son before she relocated to the village as the food here comprised freshly cooked

meals of rice, lentils, fish and vegetable to be inadequately nutritious. Her family, being more affluent than the average villagers in Bally, could also afford milk and eggs for her son. Even when it was not available from the household cattle and hens/ducks, the family could afford to buy them from the market. However, she also thought that the freshly boiled milk was of little nutritional value unless mixed with commercially packaged health drinks such as *Bournvita*, *Complan* etc. She lamented that the village grocery stores did not stock these items, so she had to be judicious and ration in offering these to her son from her own stock. Not consuming *Maggi* daily or these health drinks might have a negative impact on her son's health, she thought.

Mitali's was an exceptional case of migration where she, along with her son, lived in town while her husband was in the village. A proud woman because of her education and financial securities, she claimed that the primary reason behind her relocation to Baruipur was better education of her son, preferably in an English-medium school. Easy and ready availability of health drinks, variety of packaged food and chocolates was the next reason, she said. She particularly stressed on the importance of health drinks which are mixed with milk because she believed these would enable her son concentrate better on his studies. Thus for Mitali, these health drinks were expensive by her own admission and even by her



**Figure 11:** While some, like this tribal woman in Lahiripur, Gosaba, cooks twice daily for the family, it has become a rarity

standards as one kilo cost about ₹500 (€7) and was consumed over two weeks. She had to sacrifice other food items or important household articles to afford two packs of health drinks a month, which she thought was entirely justifiable. “Good nutrition is essential for my son to concentrate on his studies,” she said. This sentiment was shared almost ubiquitously through the region, even in the tribal *paras* where average affluence level was much lower. Here, mothers lamented that they could not afford these health drinks on a regular basis, and could buy only once in a few months, which was the main reason behind the poor health of their ward. Whenever fathers visited the villages in holidays and vacations, it was incumbent upon them to bring along tins of these health drinks, which the mothers said lasted for about a couple of months. Interestingly, many of these families could not even afford milk and mixed these powdered drinks in water. This is why drinks with added powdered milk had higher demands.

The belief that health drinks were key to good nutrition of children and nothing else could compensate it was so deeply entrenched in almost all the young mothers that they were even ready to go on collision course with their mothers-in-law, who represented the older generation. These older women generally contested the claims of the young mothers with their traditional knowledge and claimed that despite being financially poorer they had fed their children better and without the artificial dietary supplements. They claimed that they used traditional recipes which involved some work including collection of various leafy vegetables which grew abundant in the roadside or in kitchen gardens, just needed to be identified, picked or plucked. Also catching fish and mussels involved physical effort, which the older mothers claimed that their younger counterparts were “allergic” to. Now that the school anyway provided one daily meal ([see next section](#)), the evening meals, claimed older women, were managed somehow with leftovers of the morning meal or fast food such as *Maggi*. Both older and younger mothers, however, had household chores to perform, take care of the cattle and poultry, and in case they had land, took equal part in cultivation as well. Absence of men often shifted the entire responsibility of cultivation on women. The contestations over culture was manifested through various discursive battles which have been complex, to say the least, and inconclusive as this research was not intended to carry out any value judgement between claims of different generation.



Global campaigns orchestrated by private corporations – particularly through television in the rural hinterlands of India – have made smartphones, fast food and health drinks top objects of desire. Sundarbans is a representative case in point, as a region close enough to the city of Kolkata (maximum distance of 130 km) and have started getting access to electricity in the past decade. With electricity, cable television and mobile phones have emerged to be two of the commonest aspirational gadgets. The per capita electricity consumption in the Sundarbans is one-fourteenth of the average per capita electricity consumption in the entire country. However, even in islands without electricity such Gosaba, mobile towers have been installed by private corporations which run on generators (see Ghosh 2012 for details) and villages have community diesel-generator based charging points in the markets or village centres. Many households have solar home-lighting systems (SHS) through solar photovoltaic cells, which in full capacity can run a couple of light bulbs and fans. However, the SHS in most of the households is used exclusively for watching television through dish antennas (see Figure 11) protruding out of their thatched roofs. After sundown most of these



**Figure 12:** The solar home-lighting system, installed to help families work, is used chiefly for watching television. Note the solar panel on the thatched roof and the dish antenna on the ground, next to the solar streetlight

households emit a soft whitish glow while darkness descends across the islands and a few scattered solar street lights struggle to provide navigable illumination on the mud roads of the villages. The SHS, which were earlier thought to be a tool of empowerment that will allow children to study, women to complete their household chores and offer extra working hours to the family after sunset is now chiefly reserved for viewing television.

Television has perhaps been the strongest amplifier of developing aspirations about processed and packaged food. Equating certain food items with a certain kind of lifestyle was one of the clearest indicators of how certain kind of food has become essential, irrespective of their food-value or utility. Aerated beverages, soda waters, health drinks, potato chips, instant noodles, *Kurkure*, jellies, cream-biscuits, candies and their spurious, counterfeit avatars has emerged as aspirational food across rural landscapes of Sundarbans. These offer both convenience of consumption, eliminate cooking and make one feel good with a sense of belongingness with the global consumers, those in cities and in higher social spaces.

Cashing and riding on the aspiration, a wide network of local manufacturers produced spurious, low-priced, look-alike products available across grocery stores. These products were hardly subjected to any quality inspection and catered people whose aspirations failed to meet affordability. These easily available, cheap locally produced drinks, candies, biscuits, *namkeen* (salted snacks), jellies, fruit crystals seemed to have replaced traditional snacks that used to be prepared fresh locally. As two of the grocery store owners – one in Bally in Gosaba and the other in Khulna in Sandeshkhali echoed each other when they said that the children wanted to buy only the packaged food, not the ones prepared fresh such as *goja*, *laddu*, (popular sweets) *telebhaja*, *singara*, or *kachuri* (salty snacks). “*If they cannot afford the original brands then they want something close to it, which looks and tastes similar,*” they both said. Even the mothers seem to be rather happy and proud to be able to afford these food items for their children. It helped emulate the city-people and their way of life, said a doctor in the region. Doctors sounded quite frustrated about the growing consumption of processed and packaged food. One of them in Sandeshkhali claimed that it was drifting children from the habit of consuming proper meals, as these fast foods are quite filling and also killed the appetite but were very low in food value.

To compete against the spurious and look-alikes, duplicates and clones, the global food companies packaged and priced products differently – in smaller, differently shaped packets. There were completely different products too, not available in the metropolises. The marketing tricks, and strategies where vendors and hawkers even accepted human ‘hair’ in absence of cash, made these items readily available to children and women who did not have cash at their disposal. Since hair fetched a decent price in the market – ₹3000 (€40) for a kilo – mothers, young women saved their hair to buy anything from ice creams, chocolates and cheap varieties of fast food, snacks of their choice and other aspirational products. These vendors and hawkers, in turn, sold the hair in the urban markets and made a decent (often better) profit.



**Figure 13:** All that glitters is probably not gold: Village grocers today stock all kinds of branded fast food and their counterfeit look-alikes and spurious ones made by local manufacturers that attract children as well as the mothers

Education was a highly ‘valued’ commodity that families were keen to spend as much as possible despite being provided free by the government. Parallel systems of education were high in demand to meet the perceived shortcomings in both quality and delivery. Families paid a substantial part of their monthly budget to ‘private tuition’ in all the households surveyed, even for the children attending the kindergarten. This perceived disagreement over quality of government

education system vis-à-vis aspirations associated with education transferred an additional financial burden to the households. Parents thought they must compensate such gaps should the children aim to achieve better quality of life. Around twilight, well beyond their regular school hours, it appeared quite a spectacle when all the village children – from toddlers to teenagers – returned home with packs of books from respective tuition classes. Most of the mothers described this additional support absolutely essential without which there was no point sending the children to school. The proclivity to develop capacities ‘to aspire’ and using aspiration as a capital (Appadurai 2004) seemed had outpaced state controlled development, supposed to bolster the human capital without eroding the financial capital. The late evening coaching disturbed the food cycle of children who, along with their mothers, preferred consuming easily available fast food as they had to quickly start watching television. Cooking and eating a proper meal would be an unnecessary waste of time, many mothers thought.

Outsourcing the responsibility of the mothers (or the families) to an external agency and utilising their own times for entertainment such as watching television emanated from a deep-seated desire to emulate urban lifestyles. Women described spending time watching soap television serials/operas as more preferable than teaching their children or cooking hot meals, a culture distinctively in the wane. The ‘values’ as Roncoli et al (2009) indicates were attached to leisure more than the need to help children in their education or gastronomic pleasures and saving household resources at the same time. Loneliness among many of these women could also be yet another reason why activities such as watching television was preferred. The husbands, fathers-in-law, mothers-in-law and older people in the family or neighbourhood criticized the ‘modern’ wives and mothers for not paying sufficient attention to their children’s health and education. Overall, from a gendered perspective, it was clear that the mothers – owing to a variety of causes such as poor quality of education, lack of service, loneliness, valuing leisure more, or just to reinforce their position within the family – refrained from teaching or cooking for their children. They saw an opportunity in the ‘market’ to provide these products (packaged food) and services (education) to their ward. Such trend, reducing household chores to secure additional leisure was particularly prevalent among young and middle-aged women as they wanted to be a part of the wider,

neoliberal, capitalist, consumerist world order which the media, i.e. television connected them to.

Also, with cooking as a ritual in the wane, the kinship between children and the mothers get weakened too (Janowski and Kerlogue 2007, emphasis added), which was visible in the Sundarbans. As the first conception took place between 16 to 19 years of age for the women in these parts, mothers of young children are quite young themselves. As the children grew up, increasingly in broken families with one parent or both migrating out seasonally, they got influenced more by the gadgets and engaged with the media. As mothers also shifted away from cooking meals and depended more on outside food, kinship structures evolved differently. Television and gadgets shared relationships with humans that ate into the time spend with fellow humans. Such relationships with gadgets also led to increased spending on non-food (non-essential?) items that dominated the daily budget, often even replacing food items. In Sandeshkhali for example, many families reared poultry, which could have been a regular source of eggs for children. Instead, almost all the mothers interviewed said they preferred selling the eggs in the market which allowed them to buy mobile phone recharge coupons, some of young mothers even claimed that it helped paying for their mobile internet bills (Notwithstanding the fact that mobiles were often the sole communication link with their husbands majority of whom worked as migrant labours in different corners of the country). Mobile-internet was a preferred source of entertainment, which provided women their personal space, privacy and a sense of ownership with the medium that they were using.

The elderly from the region dismissively branded it as a ‘degenerative social culture.’ Tushar Kanjilal, a revered NGO functionary and a teacher who was recognised with the highest civilian awards in the country (*Padmashree*) for his exemplary work in the Sundarbans spanning over five decades described this transition in the society as “deplorable”. However, eminent personalities from the region, such as Subhas Acharya who hails from the region too and has been an administrator of the Sudarbans for over three decades, strongly opposed such a sentiment. He is of the opinion that these are outcomes of aspirations and lifestyles which people of Sundarbans have been denied for past five decades. Living in a difficult terrain, an underdeveloped, backward region was never easy and the fragility of nature made it even more difficult to plan development here, as well as

various regulations that were focused on conservation of the forest more than welfare of its population (Jalais 2014). Acharya and Kajilal, both respected for their committed work in the region, have been locked in a discursive battle through newspaper articles about the dominant development paradigms in the region and people's aspirations. While Kanjilal, a Gandhian in spirit and practice, believes in a sustainable village economy and cultural value-based social development in the village; Arachrya feels such romanticised notions of the social development was unjust for the people who had the right to choose what form of development, wellbeing, lifestyle they needed. Such debates, conflicts and arguments were palpable in the villages across the entire region, even at the household level – over migration destinations and their drivers, education, entertainment choices, media consumption and food choices.

### **Governance & Policy: The Sour Cream**

While food is a matter of personal choice and affordability, lack of nutrition (or nourishment) is as much a problem of the households as it is of the respective governments. Apart from loss of national productivity, population with poor nutrition put greater additional burden on the state healthcare facilities. On the other hand, a nutrition policy becomes difficult to conceive at a collective level, as it still is, after all, an individual phenomenon. Public nutrition policies however, tend to focus exclusively on poverty as a solitary source of malnourishment, ignoring other drivers that evolve in the society and contribute to malnutrition. Thus, an overarching health policy becomes difficult to conceive, confounded by the irreversibility of growing affluence, life-style changes and urbanization (Gaiha 2014), which lie at the heart of their limited efficacy. While poverty-malnutrition nexus is being subjected to the policy instruments mentioned below, policies from other domains migrate into the contexts and settings of malnutrition, and acquire a life of their own to have consequences (Shore & Wright 2011) that eventually impacts nutritional outcomes. In the following section we will briefly discuss these policies followed by their inability to get embedded in the socio-cultural worlds of the communities and then how they migrate to have unintended consequences, and mean different things to different actors who interact with it and are subjected to it.



**Midday Meal:** The National Programme of Nutritional Support to Primary Education, popularly known as the Mid-Day Meal Scheme (MDM), was started in 1995 in an attempt to enhance enrolment, retention and attendance while simultaneously improving nutritional levels among children in school. The Mid Day Meal Rules, 2015 have been brought under the aegis of the National Food Security Act, 2013. Free meals are offered to children up to class VIII in all government, government-aided schools and alternative innovative education



**Figure 14:** To school on a rainy day, not only the weight of books to balance on muddy, slippery roads but also the plates on which they eat their midday meal. Lahiripur, Gosaba

centres, Madrasa and Maqtabas, and National Child Labour Project schools run by the ministry of labour. Serving 120 million children in over 1.2 million schools and Education Guarantee Scheme centres, it is the largest public nutrition programme in the world. The

mandate is to provide a cooked meal with a minimum 300 calories including 8-12 gm. of protein to children studying in classes I to V. Upper Primary meals consist of 700 calories and 20 grams of protein, including 150 grams of food grains (rice/wheat) per child/school day. Under the new rules in 2015, Midday meals provided to students must be mandatorily tested at accredited labs each month for quality and nutrition.

**Public Distribution System:** Public Distribution System (PDS) is a poverty alleviation scheme, to ensure food security by subsidising food grains and other essentials such as sugar, kerosene and biscuits. PDS, despite coming under criticism, has proved to be a ‘blessing’ to the people living below the poverty line (Nakkiran 2004). This involves procurement of various food grains, building up and maintenance of food stocks, their storage, movement and delivery to the distributing agencies and monitoring of production, stock and price levels. The

focus is on incentivizing farmers by offering a minimum support price and distribute the produce to people at a much subsidised price and covering poor households at the risk of hunger under *Antyodaya Anna Yojana* (AAY), establishing grain banks in food scarce areas by involving *Panchayats* (village councils).

**Anganwadi Centres:** *Anganwadi* means ‘courtyard shelter’ in Hindi, which are formally under the Integrated Child Development Scheme (ICDS). The scheme was launched in 1975 in pursuance of the National Policy for Children and has evolved to be the world’s largest integrated early childhood programme with over 40,000 centres nationwide. The programme offers health, nutrition and hygiene education to mothers, non-formal preschool education to children aged three to six, supplementary feeding to all children and pregnant and nursing mothers, monitor growth and promotion of children. It also links immunization and offer vitamin-A supplements. Every centre is run by an *Anganwadi* worker and one helper; both undergo three months of institutional training and four-months of community-based training. The average cost of the ICDS programme is \$10-\$22 per child a year. The main objective of this programme is to cater to the needs of the holistic development of pre-school children and assist their social, emotional and cognitive development.

**ASHA:** The Accredited Social Health Activist, locally known as ASHA *kormi* (worker), is a social health activism initiative. Under the National Rural Health Mission, the government appoints a female ASHA worker in every village to act as an interface between the Auxiliary Nurse and Midwife (ANM) and the village and is accountable to the Panchayat. Interestingly, the acronym has a normative value and meaning, ‘ASHA’ in most Indian language means ‘hope’, in West Bengal, ASHA workers are called *ASHA-didi*, conveying further trust, dependence and affection (as *didi* in Bengali language means elder sister). They provide a minimum package of curative care as appropriate and feasible for that level and makes timely referrals. The ASHA workers get performance-based compensation for promoting universal immunization and referral to reproductive and child health centres, construction of household toilets and other healthcare delivery programmes.



**Food security Act:** The National Food Security Act, 2013 (also known as Right to Food) is a legislation of the Parliament of India which aims to provide subsidized food grains to two-thirds of India's 1.2 billion people, with a broader aim of alleviating chronic hunger and poverty. The Act makes subsidised food grain a right for 67 per cent of the population, or 820 million Indians. Under the program, beneficiaries can get a total of five kilo of rice, wheat and coarse grains a month at a subsidized rate. These can be bought at prices ranging from ₹1 to ₹3 (approximately 1¢ to 5¢) a kilogram, against market rates of ₹20 to ₹25 (¢35-¢45).

These government schemes have successfully focused on poverty related malnutrition. The Mid-day meal scheme, for example, has helped improving nutrition status of a large number of children (Roger Jeffery, personal communication) across India. Children are served hot cooked meal in the afternoon, the cooking is done by the member of the community chosen periodically by the Village Education Committee (VEC) comprising parents, teachers, village administrators (*Panchayat* representatives). The VEC also decides on the menu of midday meals and operates it on a daily basis. However, mothers across Sundarbans claimed that their children often abhorred the food served in the scheme – a mix of vegetables and rice daily and half an egg once a week. The food was described by the children as a 'tasteless concoction' which they do not find appetising; the food was not associated with any love and care. There were also numerous complaints of corruption and siphoning of raw materials, and of collusions between teachers and suppliers. The portion was also perceived as too small, children described the government stipulation as not quite 'filling' – or "*Oi eto tuku*" which meant 'so little' (often depicted by their closed palms) amount of rice. Children described the meals as 'tiffin'– a supplementary equivalent to 'snacks' (*jolkhabar*) and not a meal. The complaint about quantity was particularly prevalent among the tribal children who often walked long distances to school and were also very active physically. Children from families with a little better financial condition complained more about taste of the food.

The *Anganwadi* centres, well designed to address causes of malnutrition for children up to six years (Gragnotati et al. 2005), was not always accessed by mothers. The centres provide food twice daily – one cooked and one dry meal.

These are often supplemented with small packets of biscuits, roasted gram flour with banana etc. However, they served food till 9 am and many women failed to take their children by this hour after completing household chores and cultivation. The distance to the centre from house also played a critical role, households close to the centre visited more frequently while those farther away were reluctant to cover long distances to get to the centre for food, especially in the hot summers and rainy seasons. For wage labourers, it often meant being late at work or neglecting other important work that women could not forgo. Mothers often complained that for such small amounts of food, wasting a couple of hours was not rational. Low attendance at the *Anganwadi* centre was not only a feature of Sundarbans but other parts of India exhibited a similar pattern (Gragnotati et al. 2005).

Both ASHA and *Anganwadi* scheme was target-oriented which worked in its advantage to fudge figures and show much higher participation in the scheme than the actual. There is little or no supervision and while conducting fieldwork, actual attendance on given days was checked (and the *Anganwadi* worker was compelled to write correct figures because of our presence), however in the previous or preceding days, attendance were far higher. Upon questioning the discrepancy, the worker at the centre said that not all the registered children attended everyday. However, on another day, chancing upon the residence of the *Anganwadi* worker to meet her, we witnessed how the datasheets were being filled by her son. When asked, she said it was difficult to fill up the data while discharging her duties at the centre so it was better to fill up the health cards peacefully at home. Across almost all the field sites, villagers claimed that the daily attendance was about 60 per cent of the registered. Though there was certain *Anganwadis*, which performed better, it depended on the person in-charge rather than uniformity in the policy or delivery protocols.

However, the belief of meals seemed entrenched to the care and personalisation possible only at 'home'. The midday meal, for its perceived inability of not being 'filing', not served with care or not being personalized enough, failed to invoke a sense of well-being, irrespective of its nutritional value. On the other hand, mid-day meal often provoked parents – particularly in the marginal households – to compromise on meals at home. Value of meals and food was independent of nutritional benefits – children and parents cared more whether the food generated a sense of fulfilment in the minds. "My children often asks for

money, one or two rupees to buy *Kurkure*, potato chips, *Pepsi* (note: all the referred, despite brand names, almost always look-alikes or clones),” said a mother in Sandeshkhali I, underscoring how aspirations and aping led to a sense of fulfilment and wellbeing. This is the *hyperreality* of wellbeing emanating from a sense of achievement, a form of vicarious pleasure of consuming certain brands constructed to be associated with a ‘good life’. This gap between expectations over food and perceptions about their values is expected to get further disparate and incongruent as aspirations scale higher and populations disassociate themselves from subsidised, basic, mass-cooked food.

### **Discussion: Metabolism of malnourishment**

The food systems have become increasingly intricate as we see in the villages across Sundarbans, where ‘nutrition’ perhaps plays the least of the considerations while deciding a meal. Even when it does, misinformed parents seem to trust the narratives propagated by the private ‘food’ corporations through the media and not rationality or medical facts, information on which is sparse in the public domain. The relationship between the ‘ecological’ and the ‘social’ that determines the nutritional outcomes is complex to say the least and that an overarching policy that can encompass and address all these diverse drivers and improve nutritional status of children in these villages seems extremely challenging to attain. While the importance of culture cannot be instantly translated into ready-made theories of cultural causation (Sen 2004: 52), identifying the drivers at least provides the very first step to understand what comprised nutritional world of the children. As Paul Fieldhouse, a noted biologist poignantly pointed out after spending his career on the medical aspects of nutrition that culture and anthropology of food were perhaps as important, if not more:

*As someone trained in the clinical biological tradition, it took me several years to appreciate that food was more than a collection of nutrients and that most people did not make their choices of what to eat on the biologically rational basis of nutritional composition. This realisation helped to bring me to an understanding why people did not always eat what I believed was good for them (Fieldhouse 2013).*

## **Mock-tales: Knowledge gaps, propaganda and aspiration**

In Sundarbans food habits are not simply determined by mere biological needs but served to “*marked boundaries between social classes, geographic regions, cultures, genders, religions and occupations, to distinguish rituals, traditions, festivals, seasons, and times of day*” (Lupton 1996:1). Also many of these aspects had multiple layers of meaning, because, “*taste has both physical and social meaning*” (Atkins et al 2001: 272). Tastes are culturally constructed but the culture itself evolves continuously, co-opted through our latent inclinations of belonging to certain social classes and groups. Similarly taste and food culture in Sundarban has been evolving constantly under the influence of the ecological and aspirational, beyond the biological needs of eating. This challenges the exclusive domination of medico-statistical, financial approaches to malnutrition. While the omnipotent evil of poverty continues to haunt nutritional outcomes, it is definitely not the only cause. The ecological coupled with the social including even disintegrating family structures, lead to altered cultural morphology of food-habits. To simplify, I describe them through ‘food euphoria’ and ‘food fatigue’ operating simultaneously among the children and their parents, shaping the nutritional world of the subaltern.

Changes in the food value chains or FVCs (see [state of the art](#)), majority households has become net food buyers. As Sen (1981) had negated unavailability of food as the cause of famines, here also – in a different setting though – unavailability does not seem a major determinant of malnutrition, neither absence of resources (money to buy food) but the purchasing decisions. These purchasing decisions are greatly influenced by the advertisement campaigns in the television that cater mainly to the aspirations of the community. As Bass, Wakefield & Kolassa (1979) lists various functions that food serves (apart from fulfilling hunger of course), in Sundarbans the choices of food purchases and consumption seem to serve some of these cultural functions that they listed, which include cope psychological or emotional stress, bolster self-esteem and gain recognition, express moral sentiments and signify wealth (Bass et al 1979, see appendix for a full list). The advertisement campaigns precisely target the last two to achieve the desired impact on the mothers and children. The burgeoning middle-class in the rural societies, eager to make social statements through their consumption patterns and

food they offer their children, increasingly feel ethnic food as a ‘source of shame’ (Atkins 2001) as it denigrates the social or educational status of the households. The ‘food fatigue’ for the ethnic and culturally entrenched gives way to the processed and packaged food, or the ‘postmodern palate’ (ibid) in the form of instant noodles (such as *Maggi*). These were cheaper, more convenient and easy to prepare than traditional staples which gradually are getting relegated for those who can afford the former. Surrendering to a ‘food euphoria’ becomes a high-point among both the children and mothers for reasons ranging from the social to personal. It is possible to draw parallels with the obesity epidemic among the marginal population in the USA and large parts of Europe (Julier 2008), except a major deviation in case of Sundarbans. It is difficult to conceive a similar obesity epidemic in Sundarbans (or any rural parts of India) yet because of patterns of physical hardships involved in the daily lives, lack of automation and manual labour. However, increasing intake of processed and packaged food that is not subjected to any quality parameters that eludes any scrutiny or is often spurious and manufactured with substandard or adulterated ingredients can easily lead to a variety of health hazards apart from obesity. Analysis of such food products available in the rural markets and studies on their health impacts – much common in the West – need to be carried out much more actively in the developing countries to understand the long term effects these substances can have on the health and well-being of growing children.

The inexorable neoliberal development paradigm that has inducted the subaltern within its processes; the growth and consumption patterns borrowed from the west appear cathartic to rural societies such as Sundarbans with food becoming the object of expression. While “*there is no compulsion either to preserve departing life styles or alternatively to adopt the newest fashion from abroad*” (Sen 2004: 56), social or personal decisions without accessing sufficient information and awareness in the public domain in rural societies such as Sundarbans may become counterproductive in the long run. This is critical because it seems that the ecological is getting subsumed by the social, where changes in the former may not have a bearing on the food choice, culture and nutrition after all. For example, it can be safely posited that even if fish were abundant in the ecology for local consumption, the populace might not have probably consumed it the way they used to earlier. It involved efforts to catch the fish or harvest locally grown vegetables as

well as to cook them, which many tend to avoid. Under altered social dynamics, women – often alone with their children on account of migration of their husbands to distant lands – preferred spending as little time as possible in the ‘kitchen’ or in collecting raw materials as part of preparing meals. Instead, they preferred entertainment – either to keep themselves abreast with the social trends or to kill their sense of loneliness or simply to be entertained.

Unavailability of information pertaining to food values (as per the biomedical sense) helped sustained advertisement campaigns by the enterprises who produce items of desire to create perceptions of nutrition and gaining satisfaction, which also stoked social and aspirational values. Media have been considered stunningly effective in setting agendas (McComb & Shaw 1972) on what to think about and the



**Figure 15:** A migrant labour in Tamil Nadu, she cooks a day before leaving for her workplace with her husband. In Khulna Sandeshkhali

advertisement campaigns of food items in television seem to be now setting the agenda on the dinner table. Positioning of these items is achieved through a combination of selective omission of information and aligning the products with the aspirational worlds of the households in the rural landscapes, because consuming certain kinds of food stirs emotions because of its sensual properties (Lupton 2005), and not food value. Social meanings embedded in the food are thus released both through the act of consumption as well as sharing the experience within the society and peers. The latter immediately elevates the consuming household into a different league. Thus such food act both endogenously by enhancing psychological pleasure of being able to consume what people in higher societies ostensibly do and exogenously by imparting a sense of superiority and fulfilment. This pleasure, gained from food becomes high points of their everyday sensual experience (ibid). Such sensual pleasures also definitively develop tastes for products which align with lifestyles and aspirations, further bolstering the faith

and preference on these kinds of food. Notwithstanding the freedom to choose what to eat, the decisions are probably better be based on information that would confer capabilities to the people to allow them make well-informed and well-briefed decisions (Sen 1997). However, the corporations operate in a vacuum of information and knowledge, as when asked why she thought *Maggi* was good for her son, Mitali said because the television depicted such – thus unable to distinguish between a claims made in a advertisement commercial and the veracity of the messages encoded. This highlights how absence of information in the public domain denied Mitali the elementary capability to question claims made in an advertisement and depending on shared wisdom. Her euphoric conviction that instant noodles and packaged health drinks were good for her son, signified sharing a food euphoria between Mitali and her son, over certain kinds of products. On the other hand, it led to a fatigue about food available in the village to be not very nutritious. Such shared beliefs and value systems, widespread through the region, failed to appreciate government schemes and kept viewing the subsidised government provisions as substandard and inferior alternatives to what was available in the markets and. In addition, frequent reporting in the media and allegations about localised corruption in these schemes, especially in procuring adulterated and inferior raw materials, reinforced negative beliefs about the govt. subsidies.

Visual appeal plays an important role in shaping preferences of children who are attracted more to the senses of taste and smell which appeal to their emotional dimensions. Both mercantilist and capitalist phases at work in the global food industry (Lupton 2005), pay particular attention to it. Everything from appearance of a package to portion sizes are shaped to attract the children, and the messages are then propagated through television. Through the socially derived desire for the consumption habits, households then attempt to show themselves in the best possible light, as Bourdieu (1984) argues that the distinction between social groups, classes, lie in their tastes for food and other commodities which become a badge of collective identities. However, the knowledge commons (Ostrom et al 2005) might have separate intersecting commonalities like a Venn diagram; however independent regions were purged with one another to evolve the best and most effective practices within communities that needed to be understood for this research. Also ‘knowledge’ is not constant but evolving and there are

differences between perceptions of knowledge, truth claims, facts and beliefs. So a careful and close observation and interaction was done through ethnographic participation that helped to perhaps helped to disaggregate between various domains.

### **Ecopsychiatry: How does the banana split?**

Ecosystem services and human health are intimately interwoven in a delicate balance. Rapid social change and ecological alterations of human habitat – the former may result from changing socio-ecological dimensions such as urbanization while the latter often results from extreme weather events to instability in the ecological (Chaudhury & Jadhav 2012). This is why health policies in general and nutritional ones in particular must recognize the often ignored ‘ecological’ in the socio-ecological (Epstein et al 2013). In the Sundarbans, recurring disasters and other ecological factors have affected availability of basic staples such as milk as was evident in the narratives of women across villages that were hit by cyclone *Aila* in 2009 and the Perigean spring tide in 2014. Such collateral damages through the ecological cycles of weather events or slow onset damages to the ecosystem have become extremely common with changing climates and warming globe (IPCC 2014). While the immediate threats of food shortage can be tackled by the government agencies with food aid; long term, knock-on impacts such as loss of cattle and concomitant loss of milk in the diets of children for next five years could not be addressed by the local programme managers. Because development policy models are formalistic, framed by the universal logic of new institutional economics which are ‘slippery’ in application and the knowledge processes embedded within the policy is vertical, they fail to facilitate a more horizontal, cross-cutting approach to address the ‘ruptures and contradictions’ (Mosse 2011: 58) across the existing social, political and ecological systems that intersect to produce unintended results. The concept of resilience, despite being borrowed from the natural sciences, have proved useful to certain extent to address some of the impacts of the ecological as they increasingly transgress the domains of the ‘social’ (Matyas and Pelling 2015). Neil Adger, for example, argues that the notion of social-ecological systems, a concept inherited from the ecological resilience paradigm (Folke 2006), overcomes the duality by emphasising how



*“human action and social structures are integral to nature and hence any distinction between social and natural systems is arbitrary”* (Adger 2006: 268). However such treatment of the socio-ecological from a resilience perspective has largely proved inconclusive as for the policy actors, it fails ‘to assert analytical control over the material’ (Miyazaki and Riles’ 2005: 326-28).



**Figure 16:** The girl on the extreme left is one whose parents migrated to Anadaman Islands for work, with their elder son. The girl is attending a function at her neighbour's house, looks in her eyes remains pensive despite hope of a treat

Similarly, migration of parents, mental health problems it engenders among children and their cumulative impact on the nutrition of young and sub-adults hits a policy impasse. The argument over necessity or need to migrate is varied at best, while it is forced in a large number of cases because of displacement, fragmentation or loss of land, natural disasters; many also migrate in expectation of a better living in the future. Even in case of the latter, it cannot be held against the families and individuals for aspiring a better living and thus cannot be castigated in policy, which many experts including those in the civil society, NGOs and those in the governance tend to engage in. Tushar Kanjilal (see page 40), being the old Gandhian patriarch he is, insisted that this ambition to move out from the quintessentially sustainable, peaceful rural society and into the Westernized urban spaces, in lure of a good life, was the evil that created such disparaging childhoods.

There are equally strong counterviews of course from people who claim that the same good life was well within their right. This necessarily does not have to be a contrasting binary or polarized positions – people must have a right to migrate if they want to and exercise their freedom, as much as they can live happily in the rural regions. Inability of majority of the migrants to take their children along with have two primary reasons; firstly their incapability of finding a job that pays enough to sustain a family in the destination of migration because of the low level of skills and education of the migrants. Second, children acted as token custodians of the property back home, which was otherwise feared to be lost to the neighbours or relatives.

### **Food policing as policy?**

As it has been narrated, evolution of food culture and its impact on undernourishment is a multi-layered socio-cultural and ecological eventuality that demands a scalar, multipronged policy approach. Limited success of existing government programmes are perfect examples of how policies should belong to and must be embedded within particular social and cultural worlds or ‘domains of meaning’ (Shore and Wright 2011), which demands evolution of the policy worlds along with the evolution of socio-cultural world of the people. It is impossible to police about what one eats at home. At the same time, satiating aspirational urges through food cannot be contained, however, policy can definitely address the information and knowledge gap in the public domain. Just providing free food fails to emerge as a preferable and respectable option for both the children and their parents and it is important to challenge the belief and value system that food harbour in the form of social aspiration and prestige. This has gradually eked out traditional or home cooked food from the meal-space, so a robust awareness development programme based not only on information but also on alternatives towards tasty and easy-to-cook home meals seem necessary. To compensate ‘impersonal’ subsidised doles of food at schools and government centres, and to inspire more home based cooking, a project adopted in Sion hospital in Mumbai reportedly was much successful, and gained popularity among women living the slums of Dharavi (Ghosh & Deshmukh 2006). This project trained women to use

cheap, easily available raw materials to prepare tasty and trendy snacks and meals for their children at low cost without compromising the nutritional value.

To tackle concerns over migration and ecological drivers, it can be argued that capabilities of individuals depended on the nature of social arrangements, so the state and the society cannot escape their respective responsibilities (Sen 1999: 307). Providing adequate physical and social security also falls in the purview of the state which can address this sense of vulnerability. A high literacy rate and the enthusiasm of parents in educating their children reveals that the parents were keen to impart the desired level of capability in the children, so one can hope that as responsible adults, the

next generation will probably be able to decide how to use their capabilities. For the current social arrangements and governance, it is thus important to evolve a system, possibly through *Anganwadi* or in the school to offer additional support to such depressive children. It is a social (as much a governmental) responsibility that economic policies provide “widespread employment opportunities



**Figure 17:** How to dissuade him from that attractive pack of biscuits (between his legs)? In Sandeshkhali I tribal village

*on which the economic and social viability of people may crucially depend”* (Ibid). However, much more detailed studies under the aegis of ecopsychiatry need to be carried out to gain deeper understanding of how environmental shifts and social changes intersect and influence each other in shaping food culture, choice and malnutrition.

## Conclusion

Food stirs emotions, both because of its sensual properties and its social meanings (Lupton 2005). However, such emotions, when misdirected and based on misinformation can lead to catastrophic outcomes as the malnourished children in Indian Sundarbans perilously showcase. Notwithstanding the fact that diets evolve through time in response to changing circumstances of supply and demand; absence of accurate information amidst propaganda and campaigns of the commercial food industry, absence of any government or industry regulation, coupled with aspirations attached to these food items have culminated in pushing a transforming rural society into the brink of an undernourishment epidemic. Because poverty has always been the most excruciating driver of malnutrition, state policies have targeted ameliorating poverty with free doles of food in various forms, cooked or uncooked, subsidised or direct supplies. The latest Food Security Act (2013) has also bolstered such policy thinking realising little that the needs in the societies in transition has changed significantly. While values and meanings in the realm of notions of wellbeing and philosophies that construct variegated world views have seen significant up-scaling, the more ‘physical’ capabilities and abilities to distinguish between actual values or accessing actual opportunities have not been developed. In other words, food value chains have altered considerably without enhancing the capacities to aspire (Appadurai 2004). This has led to misplaced sense of ‘food euphoria’ attached to new-age, aspirational food and ‘food fatigue’ over the traditional and locally sourced food, that is not aligned to modern tastes while packaged food provided and evoked a ‘food euphoria’. Food in Sundarbans acts just as a cultural metaphor that alludes to a much greater inability of the system to open up parallel understanding of culture and spark a “robust dialogue between ‘capacity’ and ‘capability’ (*ibid*). In matters of food culture, this acts both as a significant marker of societal transition but when not coupled with capabilities, can lead to the detriment of the society. The policy and governance of food must identify this construction of subjectivity and embodied experience of food (Lupton 2005) consumption, everyday nutrition worlds of children and its relation with malnourishment. The responsibility lies with both the individuals, as Appadurai (2011:63) urges that *‘human beings engage their own*



*futures*’ to address lack of nourishment in children and with the state, as it cannot extricate itself from its role of infusing capabilities, greater equity and justice in the development trajectories.



**Figure 18:** A pursuit of happiness through healthy eating and nourishment. Can Sundarbans beat the odds?

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