

Social access and
social protection
for food security
in Asia Pacific

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Social Access and Social Protection for Food Security in Asia Pacific

Amitava Mukherjee and C. Upendranadh with contributions from Beverly Jones and Marco Roncarti

“..Famines could thrive even without a general decline in food availability”

Amartya Sen

I. Introduction

For food security, access and utilization of food are as important as producing food itself. Social protection helps provide access to, and helps utilization of, food¹ for groups of sub-population who would otherwise not be able to access and utilize food. It may be clarified that social protection regime encompasses three inter-related areas of support for the poor and vulnerable and can be viewed as a conceptualisation of protecting and promoting social policies. Social security, social assistance (transfers) and social insurance are its operational components to address promotion and protection of human development. Given the larger role of social security schemes and programmes in developing countries, the terms social protection and social security are often used interchangeably.

This paper is on social protection, role of social protection in food security and the social policy challenges of ensuring access to food for all. It starts with a discussion of the significance of social protection in human development, followed by an examination of the demographic trends in the context of pressures on food security related to migration and changing dependency ratios. Migrants, both international and internal, ethnic minorities, tribal people and “other” discriminated groups are vulnerable to food insecurity. The paper, thus, discusses the need for social policies for these food insecure groups. Reducing gender based food insecurities and discrimination based on other attributes and making more equitable access to resources for all, is subsequently discussed. The paper explores social protection for people who are exposed to shocks, with special reference to agriculture and employment. This is followed by a design of social protection measures for small farmers who are subject to shocks, seasonality and vulnerability. Finally a brief recital of social protection measures for tackling climate change has been included bearing in mind that there is paper with a fuller discussion on climate change and food security. The paper also considers institutional arrangements in relation to food security and how good governance is fundamental in improving the life of those at greatest risk of food insecurity.

¹ The great tragedy of Bengal famine of the early 1940s having granaries full of food with people dying outside dying of starvation as they had no purchasing power to buy the food (Sen, 1986), could have been avoided had there been social protection measures.

Box 1. Social protection, social assistance and social insurance

Social protection is a broad concept describing all interventions from public, private and voluntary organizations and social networks, which support communities, households and individuals in their efforts to prevent, manage and overcome vulnerability. Social protection can include employment guarantee, unemployment benefits, training programmes and public assistance schemes.

Social assistance (also known as **social transfers**) is a component of social protection that addresses poverty and vulnerability directly, through transfers, in cash or kind, to poor households. Transfers can be unconditional, as with most pensions and disability or child grants, or conditional on certain behaviour, such as regular attendance of school to be eligible for mid-day meals or local health centers, or participation in public works like food-for-work programme.

Social insurance is ex ante measures taken to manage future shocks. It is a public insurance programme that provides protection against various economic shocks (such as loss of income due to crop failure, sickness, disability and old age); participation in the programme is compulsory. Social insurance partakes the nature of social security; indeed both terms are at times used interchangeably.

II. Contextualizing social protection

While historically welfare states have devoted priority to well-being through a systematic social security measures to meet the adversities of *all population*, social policies of developing countries have not yet been able to fulfill the basic needs of millions of poor and vulnerable. Meeting the calamities, shocks, adversities and deprivations through public policy and strengthening supply side has still been the focus of many developing countries of Asia and Africa.

Systematic evolution of social protection policies can be traced back to structural adjustments of the decade 1990s, where in 'adjustment with human face' and 'safety nets' guided nations to meet the adverse impact of macro policies.

Social protection regime encompasses three inter-related areas of support for the poor and vulnerable. While social protection can be viewed as broader conceptualisation of protecting and promoting social policies; social security, social assistance (transfers) and social insurance as its operational components address promotional as well as protection of human development. Given the larger role of social security schemes and programmes in developing countries, the terms social protection and social security are used interchangeably in the literature.

East Asian economies experienced rapid economic growth in 1980s and it culminated in financial crisis in late 1990s, demonstrating the inability of states to protect the basic livelihoods of citizens. Limits to the notion that economic growth would deliver poverty reduction were exposed. The crisis has in fact exposed the limits of then existing social protection mechanisms and a systematic approach to social protection was found to be *sine qua non* to address shocks and vulnerabilities. Dovetailing social protection policies with mainstream growth and development policies has also been advocated in contrast to the *residual* nature of social protection policies hitherto followed. Pro-poor growth and development policies would necessarily mean integrating social protection policies into the scheme of macro economic development (Kabeer *et al.*, 2006).

The turn of the century registered impressive growths across the region and once again limits of growth can be seen in rise in income inequalities across the countries in the region. The sub-prime triggered financial crisis of the past two years once again demonstrated the need for coherent and systematic social protection policy response in order to further social cohesion. Chronic poverty and social exclusion are identified as important obstacles in growth translating into poverty reduction and these two can be addressed only through systematic social protection mechanisms.

Promotional and protectional role of various social protection policies have increasingly been recognized as a response to the dynamic nature of poverty and deprivation and changing character of

society and polity across countries of the region. Programmes related to enhancement of basic human capabilities, mechanisms of targeted social transfers and social assistance demonstrate the scope and the unfinished agenda of universalization of social protection measures for meeting the adversities.

Given the labour market segmentation and exclusion mechanisms that operate owing to differential resource endowments, mechanisms to address employment, decent work, work place social security are important elements of social protection policies. Market based mechanisms and state led responses have been acknowledged in such contexts to address shocks and vulnerabilities. However, employment related risks in formal sector are only one part of the overall spectrum of vulnerabilities that poor face. Given the changes in work – informalization of work and rise in informal sector, rise in employment in unorganized sector, all these by themselves create vulnerabilities among the poor. Existing social protection mechanisms respond to these challenges in an inadequate measure.

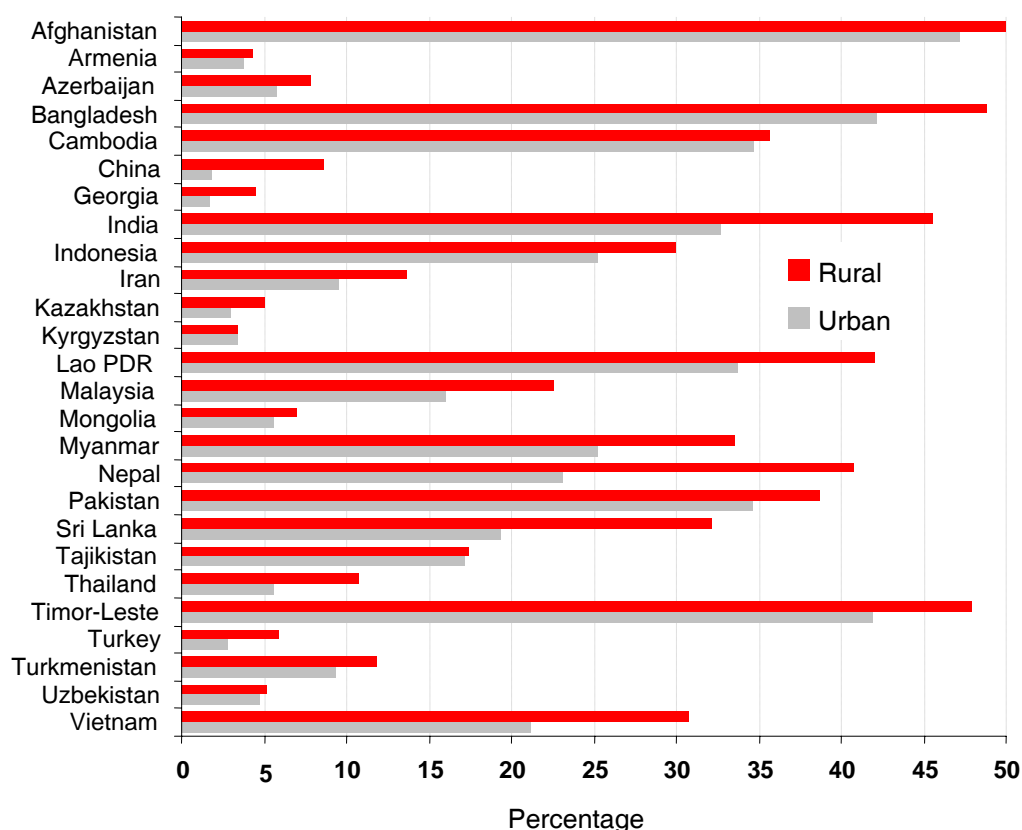
Further forms of vulnerability that reflect relational disadvantage – for example, arising from gender, caste or other forms of identity – and that lead to chronic forms of poverty are also not sufficiently addressed in the existing social protection regimes in many countries of Asia. Implementation failures of programmes and schemes are also important to acknowledge in building robust mechanisms of social protection.

III. Food price inflation: risks to human development and issues of food accessibility

Rising food prices are there to stay for some time now. There are four dimensions in which rising food prices may have a negative impact on human development, all of which are relevant to the issue of food security in Asia and the Pacific: they can increase poverty and inequality; worsen nutrition; reduce the utilization of education and health services; and deplete the productive assets of the poor (World Bank, 2008a). If there is a deterioration of any of the aforementioned dimensions it is hard to reverse and could have implications for years, and in some cases generations, to come (World Bank, 2008a). Indeed the increases in food prices in 2007-2008 have been harmful to the poor and people with special needs in that they cut into their economic access to food, reducing their consumption, noting that women in particular reported cutting food consumption (IFAD, 2008). Food price inflation in 2007-2008 had worsened the nutrition situation of the people. For example, in Indonesia for the 76 per cent of the poor who are net rice buyers, including 72 per cent of the rural poor, each 10 per cent increase in rice prices reduced the real value of the expenditure of the poorest tenth of the population by some two per cent (World Bank, 2006). In the Philippines it is estimated that 73 per cent of rural and all urban households were adversely affected by high rice prices (Brahmbhatt and Christiaensen, 2008) as their economic access was impaired. And then, as seen in case of community responses to food insecurity, in many cases like in the examples from India, Bangladesh and Nepal, utilization of education services has been reduced and productive assets depleted.

The Asian and Pacific region over time has seen dramatic aggregate economic growth and a fall in the number of people in poverty and in food insecurity. However, food insecurity affects different people differently and so does increases in food prices. It is, therefore, important to examine how specific population sub-groups have been and may continue to be affected by food insecurity and plan appropriate responses. Food security is different among countries and within countries, by age and sex and by rural versus urban residence, in addition to by the form of livelihood and whether one is a member of a particularly disadvantaged social group.

Figure 1. Underweight prevalence (%) by background information: Residence, 1998-2006*



Note: All data is for 0 to 59 months unless otherwise indicated. A year span followed by an asterisk indicates that the data are from the most recent year in that period for which data are available. For Afghanistan, the data is for the age group 6-59 months and for Azerbaijan and Sri Lanka, it is for age group 3-59 months.

Source: UNICEF (2008), Childinfo: Monitoring the Situation of Children and Women. Statistics by Area: Child Nutrition, accessed from: http://www.childinfo.org/undernutrition_weightbackground.php (9 October 2008).

Take the case of under five children. The Asia-Pacific region has 28 per cent of children under-five in the region being underweight. On a global scale, the region accounts for about two-thirds of children who are underweight and the percentage of underweight children is almost 50 per cent in certain countries. The relatively high prevalence of underweight children in rural areas is revealed in Figure 1, in selected countries in Asia. Related to this is the issue of many infants and children receiving inadequate nutrition, including that provided by breastfeeding. The extent to which infants are breast-fed is influenced by the socio-economic status of mothers as well as by factors such as the role of institutions and social frameworks; when they function well can enhance the food security including that related to improved nutrition, of infants and children.

Then there are children at risk of under nutrition and micro-nutrient deficiencies. Deficiencies of some micronutrients (essential vitamins and trace minerals that are essential for chemical processes that ensure the survival, growth, and functioning of vital human systems), are prevalent in low- and middle-income countries in the Asia-Pacific and increase the risk of illness or death from infectious diseases by reducing immune and non-immune defenses and by compromising normal physiology or and mental development. Deficiencies in three key micronutrients - iron, vitamin A and Zinc can contribute to maternal and child mortality and morbidity. Sufficient micronutrients help prevent of

disabilities such as neural tube defects and child blindness, and protect learning abilities, enable progress to be made in school and improve adult capacity for physical labour. Countries in South Asia have some of the largest prevalence rates of micro-nutrient deficiency and the largest absolute numbers of micronutrient-deficient people (UNU, 2007). Studies measuring productivity impacts have found that countries stand to lose about 1 per cent of their gross domestic product if iron, iodine, and zinc deficiencies persist. The cost of reversing these deficiencies is a small fraction of that loss of GDP due to these deficiencies. There is, therefore, a case to have interventions in place which tackle the nutritional and micro-nutritional deficiencies.

In all cases, the challenge is to put in place properly designed and properly implemented social protection interventions for enhancing the food security of the food insecure especially children and infants who by themselves will not be able to do so.

IV. Population dependency ratios, food security and social protection

As a region, Asia and the Pacific have experienced a steady decline in the annual population growth rate over the period 1997-2008, from 1.3 per cent to 1.0 per cent. With a current population of slightly over 4 billion people, the region is projected to have close to 5.2 billion people by the year 2050. With this population growth, the number of older persons (60+) is also growing rapidly in the region (See Table 1). It is projected that the region will experience an increase in older persons from 410 million in 2007 to about 1.3 billion in 2050. The proportion of older persons relative to the total population is also increasing, with a possible rise from about 10 per cent at present to 25 per cent in 2050. In Japan about 28 per cent of the population is already over 60 years of age. Population aging has been occurring at a rapid pace in certain countries, such as China, Georgia, Japan, the Republic of Korea, the Russian Federation and Singapore, and at a relatively fast pace in others, such as Malaysia and Thailand. While the absolute and relative numbers of older persons is increasing and many of them are in the category of 'young old' (60-79), a growing number are classed as 'oldest old' (80+). In these countries, with ever fewer young people and young adults, and ever-more older workers and pensioners, there are growing strains on the ability to ensure care for older persons. Older persons are disproportionately made up of women, who are generally more dependent on others for food and other basic necessities than men, due to relatively low levels of property ownership and pension entitlements. Social protection for the elderly does not always exist and in many cases where they exist, they need reform. In several countries there will be not enough money to pay pensions for the elderly in the future.

In contrast, several countries in South and South-West Asia, South-East Asia and the Pacific, have very young populations. In South Asia, total fertility rates range from 1.9 in Sri Lanka to 7.2 in Afghanistan (UNICEF, 2008). Total fertility rates in South and South-West Asia is at 2.8. With current population growth rates, both Afghanistan and Timor-Leste are expected to double their population in the coming 25 years. The Pacific island countries tend to have high total fertility rates and a very high proportion of their populations under 25 years of age. For example, the total fertility rate of Papua New Guinea and Solomon Islands was 4.0 in 2006, while for Samoa it was 4.1. Many countries with high fertility and population growth are especially vulnerable to facing constraints on resources, including food and as is the case of countries with a high proportion of older persons, countries with young populations will also have high dependency ratios. This implies that young people as well as older persons in the Asia-Pacific are or will in the short run be, largely dependent upon others for their food security. Of these countries, those experiencing slower social and economic development and less

capable of ensuring food security for its people, will face greater population pressure than others (United Nations, 2007).

Table 1. Percentage of population 60 years and older to total population, 2007, 2025, 2050 by fertility level

Fertility level	Country	Total Fertility Rate	Percentage of population 60 years and older		
		2000-2005	2007	2025	2050
	ESCAP		10.3	15.4	24.3
Lowest-low TFR<=1.5	Macao, China	0.8	11.5	29.2	42.8
	Hong Kong, China	0.9	16.4	30.2	39.4
	Republic of Korea	1.2	14.6	27.4	42.2
	Japan	1.3	27.9	35.8	44.0
	Russian Federation	1.3	17.4	23.8	32.4
	Armenia	1.3	14.6	22.6	33.9
	Singapore	1.4	13.8	31.6	39.8
	Georgia	1.5	18.3	25.4	34.9
Low TFR 1.6 to 2.1	Azerbaijan	1.7	9.2	16.7	27.6
	China	1.7	11.6	20.0	31.1
	Australia	1.8	18.7	25.8	30.2
	Thailand	1.8	12.0	21.5	29.8
	Democratic People's Republic of Korea	1.9	13.7	16.6	24.6
	New Zealand	2.0	17.3	24.9	30.2
	Kazakhstan	2.0	10.4	15.3	24.1
	Sri Lanka	2.0	10.6	19.7	29.0
	Mongolia	2.1	5.9	10.8	25.1
	Iran (Islamic Republic of)	2.1	6.6	10.9	25.6
Near-replacement TFR 2.2 to 2.9	Turkey	2.2	8.5	13.8	24.5
	New Caledonia	2.2	10.6	16.9	26.0
	Myanmar	2.2	8.2	13.9	25.6
	Viet Nam	2.3	7.7	13.4	26.1
	Indonesia	2.4	8.6	13.7	24.8
	French Polynesia	2.4	8.5	15.0	24.7
	Kyrgyzstan	2.5	7.3	11.6	21.5
	Brunei Darussalam	2.5	5.1	11.2	20.1
	Uzbekistan	2.7	6.2	10.6	20.9
	Guam	2.7	10.1	16.6	22.3
	Turkmenistan	2.8	6.2	10.8	21.2
	Maldives	2.8	5.6	8.5	20.0
	Malaysia	2.9	7.1	13.2	22.2
	Bhutan	2.9	7.1	10.1	23.3
Transitional TFR 3.0 to 4.9	Fiji	3.0	7.4	12.7	19.6
	India	3.1	7.7	11.5	20.2
	Bangladesh	3.2	5.9	9.2	17.0
	Philippines	3.5	6.2	9.8	18.2
	Lao People's Democratic Republic	3.6	5.1	7.6	16.3
	Cambodia	3.6	5.4	7.9	15.2
	Nepal	3.7	5.9	7.8	14.0
	Tonga	3.7	9.1	9.1	15.6
	Tajikistan	3.8	5.1	8.1	16.1
	Pakistan	4.0	6.0	8.6	16.5
	Vanuatu	4.2	5.2	7.7	15.9
	Micronesia (Fed. States of)	4.2	5.6	9.2	15.3
	Papua New Guinea	4.3	4.0	6.3	11.2
	Solomon Islands	4.4	4.8	6.3	13.0
Samoa	4.4	6.6	10.3	17.4	
High TFR =>5	Timor-Leste	7.0	4.6	5.3	7.6
	Afghanistan	7.5	3.7	3.8	5.6

Source: United Nations (2007) World Population Prospects: The 2006 Revision (New York, United Nations Population Division).

Social protection for the elderly, the young and women is critical. In many cases the need may be to reform the social protection system, finding innovative ways to finance social protection and target social protection measures². Coverage of social protection by government and market instruments remains very low in the Asia-Pacific region and is not always focused on the food insecure, with roots in fiscal and implementation constraints, and in the political economy of the countries of the region. The “business as usual model” can not be left unhindered and governance has to improve. By thinking “outside the box”, there are opportunities for social protection to engage and improve risk management using innovative approaches for greater food security. For example, the new financing being made available for climate change is an opportunity for scaling up social protection instruments to counter threats to climate change-induced food insecurity.

V. Migration and food security

(a) International migration

The Asian and Pacific region has witnessed a dramatic increase in international migration in the past few decades, with 58 million migrants in 2005 (United Nations, 2006). There is a high level of migration from China, the Philippines and many of the South Asian and Pacific island countries, and some central Asian countries. Increased disparities between countries with regard to income and opportunities, and demographic imbalances among countries encourage people to move so as to improve their lives. In many cases, the financial remittances sent by migrants enable families to purchase more and better quality food and are a very important contributor to poverty alleviation and overall socio-economic development. In 2007, over \$121 billion worth of remittances were received in the Asia-Pacific region, more than double the figure in 2000 (World Bank, 2008b).

Remittances from migrant workers enable many families to purchase food. India, Bangladesh, Philippines and Sri Lanka receive large amounts of remittances. The Philippines, for example, receives over \$7 billion in remittances each year from the United States alone, while India receives about \$12 billion annually from the Middle East (Asian Migrant Centre, 2003). While it is difficult to predict the impact of the global financial crisis on migration and remittances, judging for other crises, migrant worker flows may slow, but stocks should remain close to what they are. Remittances may be sent by fewer migrant workers.

Although remittances can have positive effect on food security, various negative consequences of migration remain worrisome. Migrant workers frequently constitute vulnerable populations in the host country or in the urban areas where they move to, because they are often not entitled to government assistance, may be very dependent on their employer for food (such is the case for domestic workers), may not be entitled to health and education services and may lack social networks which they had in their communities of origin. Box 2 gives an illustration of a limiting risks faced by migrants. As a consequence, they face heightened risks of food insecurity. Social protection for migrants is critical.

² There are, however, countries with a large proportion of people of working age (15-64), such as the Islamic Republic of Iran, Mongolia and Myanmar, who are at the stage of the demographic transition, called the *demographic window of opportunity*, implying that they are optimally placed to benefit from economically productive investment, the ‘demographic dividend’, as a result of low economic dependency levels and a relatively large number of potential workers to support those in the non-productive age groups. In the context of food security, such a situation allows for the diversion of a significant proportion of national output from consumption to investment without sacrificing existing living standards.

Box 2. Myanmar migrants cast adrift at sea by Thai security forces

About 200 Myanmar migrants found adrift off Sumatra told rescuers they were beaten, towed out to sea and left to their fate by Thai security forces, reported an Indonesian navy officer. The migrants, all men from Myanmar's minority Muslim Rohingya community, said they had been cast adrift by Thai security forces as they tried to flee persecution in their military-ruled homeland. They showed scars from beatings they said they had received at the hands of the Thais, matching similar allegations from another group of 174 Rohingya who were found off Sumatra on January 7 (2009).

"They were drifting for about 21 days. Most of them are in critical condition and are receiving treatment at a local state hospital in East Aceh district." Using limited Malay, the Bengali-speaking migrants said they had left their homes in Myanmar's western Arakan state because they were being forced to embrace Buddhism, according to the navy officer.

Myanmar's military rulers effectively deny citizenship rights to the Rohingya, leading to discrimination and abuse and contributing to a regional humanitarian crisis as hundreds try to flee the country by boat every year.

Source: France 24, International News: AFP News Briefs List; *Myanmar migrants say cast adrift by Thais: Indonesia navy* by Nurdin Hasan; <http://www.france24.com/en/20090203-myanmar-migrants-say-cast-adrift-thais-indonesia-navy>, last viewed 5 February 2009.

(b) Internal migration

Migration (or internal displacement) also takes place within countries and territories; often as a response to livelihood or food insecurity, landlessness, loss of land tenure or crises. Conflicts, such as those in Afghanistan and Timor Leste, have displaced millions of people and contributed to greater food insecurity. On the other hand, migration is often seasonal and is used as a coping mechanism to improve food security, such as in the case of some of the Central Asian countries as well as other countries in Asia and the Pacific.

Box 3. Migration and food security

Garhwa, India, is a district characterized by a high percentage of poor and landless families. Recurrent drought and famine have resulted in large scale migration to the neighbouring states of Bihar, Uttar Pradesh and Chattisgarh. Ultimately it is food security that lies at the heart of all. The whole family migrates to different states during the course of a year. It is women who have to bear the greatest burden. They comprise the majority of the population below the poverty line and are very often in situations of extreme poverty, given the harsh realities of intra-household and social discrimination. Migration also results in a breakdown of social life: this is true both in the case of men migrating alone and when entire families migrate. Women and young girls are especially vulnerable to sexual exploitation. Migrant workers have no access to subsidized grain at their destinations and spend a sizeable proportion of their wages on basic food supplies.

Source: *Alternative for India Development: Food Security and Migration*, accessed from http://www.aidindia.org.uk/nl_mig_nov06/mig_oct01.htm (15 January 2009).

Migration occurs within countries and the trend is generally from rural areas to urban ones, again by those seeking greater opportunities including by those landless poor. For example, China's economic development and rapid urbanization have increased the number of people moving within the country, largely from rural areas to towns and cities, in search of job opportunities. Although exact figures vary by tens of millions, official statistics place the number of internal migrants in China at over 130 million (Tan and Xin, 2009) despite the *hukuo* system³. The implications for food security are significant, with more people becoming dependent on market transactions for the purchase of food and thus susceptible to price fluctuations. These migrants become even more vulnerable during recessions and down turns. To continue with our China example, 20 million of the 130 million workers lost their jobs in 2009 (Ibid.) due to the recession and will be further at risk of food insecurity.

Mongolia provides an example of food security-related migration to urban areas. Summer droughts, extremely harsh winters, over-grazing and locusts as well as unaffordable, privatized veterinary services have at times caused the death of livestock and pushed herders off the land and into

³ A system by which people were tied to where they lived by making government services contingent upon their occupation and place of residence.

urban poverty, even though under nourishment is more severe than in rural areas. A similar situation exists in many parts of South Asia, where high levels of urban poverty and related food insecurity often prevail.

Thus due to the forgoing phenomena, *inter alia*, countries of the Asia and the Pacific have experienced high rates of urbanization and are expected to continue becoming increasingly urbanized in the years to come. For instance, from having an urban population of 42 per cent in 2008, the region is projected to have 51 per cent of people living in urban settings by 2025 (ESCAP, 2008a). The expansion of urban areas often encroaches on arable land that could otherwise be used for food production, hence threatening food security. In addition, within urban areas there is increasing pressure on public services, including those related to hygiene. Millions of people are living in slums where sanitation and water are inadequate and thus increase the burden of disease and exacerbate food insecurity. Furthermore, in Asia and the Pacific demand for food is especially high in poorly planned and managed cities which pushes up the price of food, given limited supply, and makes the poor and other vulnerable groups especially susceptible to food insecurity due to lack of access to food. Growing urban populations spur changing food habits and, frequently, increasing dependence on imported food at the expense of locally produced ones (High-level Task Force on the Global Food Crisis, 2008). So special social protection for those in the slums in cities and urban areas can no longer be ignored. Due to urban economies being highly monetized, creating employment leading to income security as a social protection measures is especially crucial for people living in cities and urban areas for improving food security.

In the Pacific, where there are high levels of internal migration and poverty in towns and cities poverty generally does not imply the kind of food insecurity or destitution experienced in certain other parts of Asia. It rather means a continuous struggle to meet essential living expenses in urban areas in particular, especially those that require cash payments. Families constantly have to make choices between the competing demands for expenditure on food and other basic needs, given their limited availability of cash income. Often trade-offs are made, for instance between food or school fees and there are struggles to purchase adequate and suitably nutritious food. As seen in other parts of the region, households may borrow regularly from 'loan-sharks' who charge them very high rates of interest for small unsecured loans to meet basic family commitments and community obligations. As a consequence, many families are frequently, and some families are constantly, in debt (Abbott and Pollard, 2004). Moreover, in a more monetized economy they are at greater risk of food insecurity. The need to improve income opportunities and social protection, including access to affordable credit, is, hence, fundamental in enhancing food security for the most vulnerable in the Asia Pacific.

VI. Ethnic minorities, tribal people and discriminated groups of people: vulnerabilities and food security

With the great diversity of the Asian and Pacific region, those who are vulnerable to food insecurity often vary given local socio-economic contexts such as traditional, religious and cultural practices. The Asia and Pacific region is home to 60 per cent of the world's population and 70 per cent of the world's indigenous populations.⁴ The indigenous peoples and tribal people of Bangladesh, India, Pakistan and Philippines, as also the minorities in China, India and Nepal suffer from food security. In India and Nepal for example, caste-based discrimination increases vulnerability to food insecurity of people belonging to lower castes, also called *Dalits*, who make up over 13 per cent (over 3 million

⁴ UNFPA (2007)

persons) of Nepal's⁵ total population, and over 16 per cent of India's population numbering 167 million people.⁶ People in countries like Timor Leste who have been displaced by conflicts and in Myanmar who have been displaced by natural disasters are especially vulnerable to food insecurity. Essentially whoever has power, access to and control over resources (financial, natural, human, and others), generally has better access to food. Inequality and misuse of power have always caused, amongst other maladies, food insecurity, both within countries in the Asian and Pacific region as well as within each community and household. Thus the people who are made vulnerable due to discrimination and displacement by conflicts or natural disasters because they lack power and control over resources lead to food insecurity. The same applies to people with disabilities numbering more than 400 million in the Asia Pacific region⁷ and people living with HIV/AIDS, numbering 6 million or so in the region.⁸ See Box 4 for some issues that people living with HIV/AIDS face.

Furthermore, numerous indigenous and people belonging to tribal groups, in many countries in Asia and the Pacific over many years have lost access to their traditional land and forests and other common property resources on which they depended for food and livelihoods. The consequences have been disproportionately higher levels of food insecurity suffered by such groups, many of which have also not benefited equitably from socio-economic development. These socially marginalized people face greater barriers in gaining access to food, due to disadvantages with regard to knowledge, income earning capacity and a variety of other factors.

Financial inclusion and universal obligations to create financial access need to be an important strategy for these groups of people. Evidences point that in countries where formal financial infrastructure exists, a robust downscaling of the formal sector to reach out to meet the needs of these groups of people would be a compelling strategy in the context of globalization to meet their needs. The ideas of 'self help groups' and micro finance as a means to reach to these socially excluded are important innovations. Besides credit, micro finance includes the provision of the services of savings, pension, insurance and money transfers. From this perspective, contextualizing micro finance in the realm of social protection becomes crucial to reach to the poor, and for policy implications. Grameen Bank II experience in this regard comes as one of the best practices with potential replicability for the entire region.

Box 4. Bangladesh Programme on Food Security

Challenging the Frontiers of Poverty Reduction/Targeting the Ultra Poor (CFPR/TUP) extends the '*laddered strategic linkage*' approach of Vulnerable Group Development (VGD) to the very poorest. It builds up the asset base of the poorest, beginning with transfer of income generating assets, health and education support, training, social development and later integrating with micro-credit programmes, to reduce poverty among the poorest and support income generating activities. In a 2004 mid-term assessment study on the 2002 entrants and a comparison group, it was found that the programme participants fared significantly better in nutrients and in overall calorie intake, with a calorie gap from RDA (Recommended Dietary Allowance) at 8 percentage points lower for participants; 97 per cent of participants reported to be in 'food deficit' at the baseline, but this was reduced to only 27 per cent two years later; (iii) severe malnourishment among children under five years was reduced by 27 percentage points for participants but only 3 percentage points for the comparison group.

VII. Social protection and the challenge of gender based food insecurities

The multi-faceted inequalities that women face in Asia Pacific are matters of public history. Such inequalities increase the vulnerability of women and girls to food insecurity more so if they are elderly

⁵ Anita Shrestha (2003)

⁶ Navsarjan (2008-9)

⁷ ESCAP (2009)

⁸ ESCAP (2007)

and/or disabled belong to a lower caste or ethnic minority. It is, therefore, necessary to understand inequality within households and how intra-household distribution of food and other resources affects individuals' food security within the household unit, in particular for women. (Cromwell and Slater, 2004).

Women face seven inequalities, viz., mortality inequality, natality inequality, inequality in access to basic facilities, inequality in access special services, professional inequality, ownership inequality, and finally, household inequality⁹. Based of these seven inequalities faced by women, it is easy to identify seven kinds of food insecurities faced by women, as under.

1. *Mortality inequality based food insecurity*: In some Asian countries, there are unusually high mortality rates of women and a consequent preponderance of men in the total population, as opposed to the preponderance of women found in societies with little or no gender bias in health care and nutrition. Women and girls may be denied adequate nutritious food, resulting in higher infant and child mortality rates than for boys.
2. *Natality inequality based food insecurity*: In many male-dominated societies, male children are preferred and female children are often aborted, or seen as a burden. This preference can lead to girls and women being in a weaker position to be food secure, by suffering from limitations to physical and social access to food.
3. *Basic facility inequality based food insecurity*: Females have less access to education and learning or fewer opportunities to develop their talents and skills, hence limiting their productivity in producing food and opportunities for employment, jeopardising their long term food security.
4. *Special facilities inequality based food insecurity*: Females may have access to basic facilities such as primary education, but their opportunities for higher education and professional training may be fewer than for young men because, inter alia, "the culture does not see this as 'feminine'". Girls may be discouraged from studying subjects that are deemed to be 'the province of men'. This includes agricultural sciences and training in techniques for improving agricultural productivity. Such inequality prevents men from achieving improved access to better food.
5. *Professional inequality based food insecurity*: In terms of employment as well as promotion in work and occupation, women often face greater handicaps than men. Women's income-earning potential is therefore hindered, which in turn reduces her ability to purchase food.
6. *Ownership inequality based food insecurity*: Women do not have the same rights as men for inheritance or ownership of productive resources such as land¹⁰ and capital. The absence of claims to property can not only reduce the voice of women, but also make it harder for women to enter and flourish in commercial, economic and even some social activities. With less access to land and other resources, women often become dependent on others for food especially as widows, when divorced or abandoned. These taken one with the other contribute to food insecurity of women. More over ownership inequality reduces women's ability and incentives to invest in agricultural land having a bearing on food security.
7. *Household inequality based food insecurity*: Even in cases in which there are no overt signs of anti-female bias in, say, survival or son-preference or education, family arrangements can be quite unequal in terms of sharing the burden of housework and child care, limiting women's

⁹ Sen, Amartya (2001)

¹⁰ Some studies in China also show that increasingly the landless tend to be women. Figures derived from a survey undertaken by the All-China Women's Federation and the State Statistics Bureau of 2000 showed that 70 per cent of people without their own land were women, and among these women, 20 per cent had never held land, while the rest had lost their land upon marriage, divorce, or reallocation (Li, 2003).

opportunities for earning income and may include girls being fed less food and food of lower nutritional value than boys. Intra-familial distribution of resources including food within households, such as women being expected to eat the least and after all others in the family, makes women vulnerable to food insecurity.

There are other aspects of gender based food insecurities as well. Labour force participation of women remains very low in some parts of Asia, and gender-based discrimination and wage gaps remain problems for the Region as a whole. Women's wages are consistently lower than those of men for the same work. This has serious implications for the food security of households that depend on female earners. In the case of Bangladesh for example, the female wage rate is so low that a day's wage cannot maintain a family of three, even if the female worker is employed full time. Rural women face the bleakest situation. With the poor tending to spend such a high proportion of their earnings on food, and women usually being expected to put food on the table, the low wages and limited employment opportunities of poor women affect the quantity and nutritional quality of food which can be purchased and consumed.

Women play a critical role in the rural economies, particularly so in food production. In most parts of the developing countries of the Region they participate in crop production and livestock care including foraging fodder; provide food, water and fuel for their families; and engage in off-farm activities to diversify the family income. In South Asia, 61 per cent of working women are employed in agriculture (ILO, 2008a). According to the International Fund for Agricultural Development (IFAD), in Asia, women contribute about 65 per cent of the total food production (Inter-press Service, 2008). In the case of Nepal, 40 per cent of women are economically active, with most employed in the agricultural sector and the majority working as unpaid family labourers in subsistence agriculture. A similar picture comes from other parts of the Asia-Pacific region. Yet rural women are discriminated against in matters of access to a range of resources such as credit, land, agricultural inputs and extension services and employment, both within the community and household. Such discrimination has an obvious bearing on both availability and access to food for women.

With men increasingly moving out of farming and livestock rearing due to migration, among other factors, or to only cash crop production, agriculture, and food production in particular is becoming more and more "feminized" in much of the region. The women left behind often have few skills outside agriculture and have little direct access to land, credit, inputs or information. Special measures are required so that the existing institutional mechanisms for delivering credit, technology, agricultural extension, and so on, which are typically oriented toward male farmers, are remoulded to be fair to women. If women are increasingly the farmers, guaranteeing security of land tenure for women can prove the key to both agricultural revival and providing food security to rural families as well as tackling poverty (Agarwal, 2008). It is also important to look at access to homestead plots for women and not only agricultural land.

Discrimination faced by women in matters of health also needs to be mentioned. The high percentages of underweight children and particularly girls in the region should be a matter of concern¹¹ since some of these could be related to the health of women and girls which in turn are influenced by cultural practices that discriminate against them. For example, women are denied certain foods as

¹¹ UNICEF notes that approximately 47 per cent of India's under-five population is underweight, with Bangladesh and Nepal having a higher child undernourishment rate at 48 per cent. Over half of the world's underweight children live in just these three South Asian countries, with South Asia being the only region in which girls are more likely to be underweight than boys (UNICEF, 2006).

widows or when pregnant based on often incorrect beliefs. Such beliefs include pregnant women avoiding certain types of bananas and other foods for fear of having difficulty during delivery and producing children with disabilities (Roncarati and Taoprasert, 2000). Many babies are born underweight, largely due to maternal under-nutrition or malnutrition. South Asia has especially high levels of maternal under-nutrition, and anaemia, which in turn relate to high maternal mortality. In a continuous cycle of under-nutrition, underweight and undernourished, girls grow up to become undernourished mothers. Such mothers often have limited access to appropriate food and good quality health care during pregnancy and, therefore, in turn, are at risk of giving birth to children who are underweight (ESCAP/ADB/UNDP, 2008), who will have lower cognitive skills and hence vulnerable to food insecurity. In India for example, one out of every three adult women is underweight and therefore at risk of delivering low birth weight babies.¹²

The challenge is to develop social protection measures that deal with food insecurities and discrimination faced by women in a systematic and sustainable manner. Social protection measures for women have to be long term and systemic in order to be effective as they have to circumvent deeply entrenched socio-economic trends.

VIII. Social protection to deal with shocks

We know, there are two kinds of shocks, idiosyncratic shocks and covariate shocks that people face¹³. These shocks can be of every description ranging from food-fuel inflation, epidemic and pandemic, earthquakes, floods, droughts, hailstorms, pest attack, recession and economic downturn, civil strife and conflicts to fire, loss of income due to illness, loss in limb, sudden loss in jobs, breakdown of assets for livelihood and on and on, on a growing list. While there are various preventive socio-economic measures that can be put in place to allow greater access to food by all – from macroeconomic changes to specific taxes, subsidies and incentives – certain social protection interventions will also be needed to help those affected by sudden shocks. Social protection, whether in the form of cash transfers, food aid, school feeding or public works programmes, help cope with these shocks, whether idiosyncratic or covariate.

Devising social protection measures to deal with such a wide range of shocks is a serious challenge. Well-functioning social protection schemes serve to ensure the fair distribution of the gains and costs associated with globalization and economic restructuring. Given that many services such as health and education have to be paid for by families, even temporary job loss can have a considerable impact on the affected households. The challenge for Governments to help low-income groups is likely to become more difficult because of the increasing numbers due in part to the deepening financial crisis and rising income disparities. In addition, along with demographic changes, traditional forms of social capital such as kinship systems have been weakened, raising the importance of social protection for food security all the more. Two kinds of social protection measures to deal with shocks commend themselves, for their reach and implementability, improvements in agriculture, employment generation programmes and ex ante management of shocks.

(a) Agriculture

Improved agriculture is one of the best forms of social protection. Agriculture is a critical source of livelihoods and employment, especially for women in most developing countries in the Asia-Pacific

¹² Ibid p. 12

¹³ See World Bank (2000/2001) for a discussion on these kinds of shocks.

region and a key pathway out of poverty (World Bank, 2007) and food insecurity. During economic downturn where industrial and service sector jobs shrink, agriculture provides enormous respite. Investment in agriculture is, therefore, not only a good for increasing food availability and economic access to food, but to provide good social protection. Since in the Asia Pacific region, women perform much of the agricultural work and produce most of the food crops (about 65 per cent of the total food production in Asia), expansion in agriculture will expand more income opportunities for women¹⁴. And because when women have access to income they tend to spend a higher percentage on food for the family, food security at the household level stand a better chance of improving.

Making agriculture more socially and economically viable is important, to reduce poverty and address food insecurity in terms of both improved availability and access. Strategies that seek to revitalize agriculture may help connect the rural poor to cities and markets; improve service delivery to boost the health and education of the rural poor; diversify agriculture to tap new markets and opportunities; introduce crop insurance to mitigate crop failures and price declines; revamp land policy for socially inclusive growth and promote social mobilization to influence agricultural policy. In some situations, strategies which seek to facilitate people moving out of agriculture, for example by empowering the people to enter labour markets through better training and promoting the rural non-farm sector hold great promise (ESCAP, 2008c).

(b) Employment

Employment as a social protection measure to deal with shocks is crucial for food security, because it creates income directly. Under normal circumstances, managing the inter-dependence between consumption and income is the key to ensuring food security (Sen, 1997). Hence, normally while food needs to be available, people need to have access to income and other resources to access food, to ensure food security. The World Commission on the Social Dimension of Globalization points out in its Study *A Fair Globalization: Creating Opportunities for All* (ILO, 2004) that employment to enable (economic) access involves positive potential for food security.

Providing employment to people during shocks becomes even more important for food security. That is why *The Comprehensive Framework for Action*, presented in July 2008 (High-level Task Force on the Global Food Crisis, 2008), emphasized that employment is crucial to enable people to purchase food. In this connection employment through guaranteed employment for a minimum number of months or weeks, during disasters, acts as *de facto* insurance via, for example, public employment guarantee schemes (EGS) exemplified by food-for-work (FFW) or cash-for-work projects. EGS and FFW additionally offers considerable insurance against idiosyncratic shocks, as a means of protecting the valuable, productive assets of vulnerable groups who suffer unexpected income loss, unemployment, or other adverse effects (Jalan and Ravallion 1999, Barrett *et al.*, 2004).

It may be added that food security outcome of employment for women is better because women have a higher propensity to allocate incremental income to food, especially their children.

It ought also to be added that employment will generally improve people's ability to buy food, but it needs to be accompanied by measures to reduce and ultimately eliminate wage discrimination otherwise there will always be groups, who do not equally benefit from the employment opportunities and will be at greater risk of food insecurity. That is probably one reason why Sen (1997) argued at length that "expansion of employment and decent rewards for work" is one of the eight imperatives for food secure society (Sen, 1997). Implementing measures for fair and equitable wages is, therefore, a

¹⁴ Notwithstanding the fact that wages earned by women are less vis-à-vis men.

good social protection measure. Elimination of wage discrimination as a social protection measure will additionally help the already-disadvantaged sub-populations who are often relegated to do the most insecure and '3-D jobs' (dirty, dangerous or degrading), usually in the informal sector where there is no enforcement of labour laws and lack in social protection such as pension funds and workmen's compensation in case of occupational accidents.

(c) Ex ante management of shocks

It is well known that, large sections of population in the Asia Pacific Region are vulnerable to several shocks that could lead to food insecurity, be they from natural disasters or climate change. Where food insecurity may have already existed and is compounded by the threat posed by sudden adverse shocks (such as the Asian Tsunami in 2005 or the Sichuan Earthquake in China during 2008), there is considerable return through improved *ex ante* risk management and providing improved coping strategies through insurance and insurance-like responses. The key challenge is to have counter cyclical risk management programs in place, before the onset of natural disasters, with flexible targeting, flexible financing, and flexible implementation arrangements (Alderman and Haque, 2006; de Janvry *et al.*, 2006).

Most people who are food insecure are the ones who suffer from idiosyncratic shocks caused by water borne diseases due to lack of access to potable drinking water and other health shocks; transitory shortfalls in access to and utilization of food and shocks to assets and income. These are disproportionately specific to individuals and households in the Asia Pacific Region. It is, thus, important to tackle idiosyncratic shocks to prevent an overwhelming majority of food insecure individuals or households to occur outside "humanitarian emergencies" that are associated with covariate shocks. This underscores the need for effective, ubiquitous and continuing *de jure* insurance programs, whether through financial innovations such as micro-insurance, index insurance schemes or community based insurance programmes.

Measures to revitalize and make the food distribution system for the poor, especially for vulnerable groups more effective and responsive also need to be looked at. Public food distribution systems need to be universalized for the old, infirm, disabled, widows and ethnic minorities, and community managed alternative public distribution system (APDS)¹⁵, should be up-scaled, for food security, environmental management and bio-diversity conservation. Governments should create an appropriate regulatory environment that facilitates the spread of APDS for all those who are vulnerable to food insecurity.

IX. Social protection, small farmers and food production

Small farmers have a stalwart role in providing food security in the Asia-Pacific Region. Social protection to small farmers is of special interest, as they play a pivotal role in protecting vulnerable livelihoods of small farmers, and have beneficial effects on agricultural production leading to improvements in food security. How various instruments can alleviate liquidity constraints for smallholders, create demand for farm products, create multiplier effects throughout the local economy, help deal with seasonality, and help risk taking by small holders are especially important. These challenges are by no means exhaustive.

¹⁵ See papers on community based responses.

(a) The Challenge of alleviating liquidity constraints of small farmers: cash and food transfers and their multiplier effects

One of the major barriers to agriculture production is lack of access to liquidity during agricultural operations to buy agriculture inputs (Ravallion, 2003). Small-holders, with limited or no access to credit or access to credit at predatory rates of interest, are often able to purchase only a fraction of the required inputs, which leads to lower output, lower net incomes and lower returns to labour and capital (World Bank, 2007). Evidence suggests that cash transfer programmes prevent small holder households at risk from adopting damaging coping strategies (like asset sales, indebtedness, removing children from school etc.) and relieve, at least partially, the liquidity constraints faced by smallholder farmers and allow them to accumulate productive assets (Coady, 2004; Harvey, 2007). Cash transfers can unleash untapped productive and income generating potential, by boosting household investments in farming as well as non-farm micro-enterprises, all contributing to betterment in food security (Martinez, 2004). Small percentage of transfers (even when small in amount) received by some poor households are invested in fertilizer and seeds, leading to higher food production. The challenge is to make available cash to small farmers in time.

Like cash transfers, food transfers also have a bearing on small farmers. Food transfers to small farmers increase labour supply to agriculture, wage work and business activities. (Abdulai *et al.*, 2004), noting however that bringing food from outside, for food transfers, can harm local farmers, due to falling prices and commercial displacement (Barrett, 2006) while on the other hand, if food is procured locally, the net food purchasers can be harmed by driving food prices up. However well-targeted, and well-timed food transfer has minimal negative price effects, because it reaches households who are already priced out of the market (Barrett and Maxwell, 2005). Besides food transfers have very positive effects by helping local production, labour markets and consumption patterns when food for food transfer is locally sourced or from elsewhere within the region instead. For example, the school feeding schemes or food-for-education (FFE) programmes have been found to have positive impacts on local agricultural production. Local purchases of food for school meals can stimulate production by augmenting demand, not only for staple crops but also for vegetables, meat, eggs and dairy products (Ahmed and Sharma, 2004). In Bangladesh biscuits provided on the school feeding programme opened a new market opportunity for local wheat farmers (Caldes and Ahmed, 2004). During Indonesia's economic crisis in the 1990s, the government initiated a country-wide school feeding scheme, which stipulated that the local staple should not be included in school meals, to avoid meal substitution at home, and that only locally grown commodities should be used. Meals were prepared by local women, organized through local women's associations. A survey found that 72 per cent of farmers interviewed said that the school feeding scheme had given them more opportunities to sell produce from their fields and vegetable gardens (Studert *et al.*, 2004). A well-targeted and well-timed food transfer for small farmers as a social protection measure will be beneficial for food production because it will reach small farmers who being already priced out of the market, would otherwise resort to depletion of productive assets, jeopardizing their long term food security.

While local sourcing of food can generate demand for local production, cash transfers are likely to have more positive secondary and multiplier effects than food transfer, because cash is spent on purchasing goods and services, which in turn create employment and income for the providers of these goods and services. These multipliers apply equally to transfers given to economically inactive groups (like social pensions or child support grants) as to transfers given to small farmers. However, the synergies with agriculture are likely to be higher were the recipients to be the farmers, who spend at

least a part of their incremental income on agricultural operations. The magnitude and distributional impacts of economic multipliers depend on a number of factors, including the openness and structure of the local economy, its linkages with urban centers and other large markets (Taylor and Yunez-Naude, 2002), as well as the expenditure patterns of different groups receiving cash transfers. True that the macro-economic benefits claimed for cash transfers are based on limited empirical findings, and the evidence to date is ambivalent (Devereux and Coll-Black, 2007), but there is sound evidence in support for localized multiplier effects of social transfers.

(b) Small farmers, timing and seasonality

The detrimental effects of seasonality on smallholder food insecurity and vulnerability are well known (Chambers *et al.*, 1981; Dercon and Krishnan, 2000). Given the seasonal character of **agricultural production**, the importance of facilitating access to inputs for smallholders who face seasonal cash constraints cannot be over emphasized (Devereux, 2007). While subsidies to inputs like the fertilizer subsidies or free seed distribution are at times controversial due to their adverse market and distributional effects (World Bank, 2007), they have successfully increased food production in many countries in the Asia-Pacific Region such as China, India, South Korea, Thailand and Vietnam, with positive impacts on food production and household and national food security. There is thus a case for providing resources to small farms, in different ways including through micro-finance provisioning.

Seasonality of fluctuations in food and asset prices undermine household food security of small farmers by raising the cost of accessing food while reducing the market value of assets sold at 'distress prices' to buy food. Uncertainty in commodity markets makes it difficult for farmers to allocate productive resources efficiently, and may cause producers, consumers and traders to engage in risk-reducing strategies such as diversification into lower value but more stable products, not using purchased inputs, and not trading in remote locations. Prior to the era of globalization and liberalization, many governments typically intervened in grain markets in an attempt to ensure price stability throughout the year for both consumers and producers, through providing farmers minimum support prices for selected crops and state procurement of their produce through parastatals such as the Food Corporation of India, in India. There are advocates who disfavor 'interventionist' measures in favour of market-based solutions, nonetheless, large countries like China and India still intervene in grain markets to ensure price stabilization for the benefit of small farmers¹⁶.

When it comes to **seasonality in labour market**, well-timed public works programmes partly address the seasonal under-employment that is typical of rain-fed agriculture systems. As an 'employment-based safety net', food- or cash-for-work programme offers smallholders a supplementary source of food or income for consumption smoothing purposes during non-agricultural seasons (also called lean season) because small farmers often fail to produce enough to feed their households round the year. A known employment-based safety net is the one provided by the National Rural Employment Guarantee Act of 2005, in India (mentioned above), which entitles every rural household to 100 days of employment at the local average agricultural wage. Apart from smoothing consumption in farming households during food insecure seasons or bad years, the assets constructed by the public works

¹⁶ Market-based tools such as futures markets may also be able to insulate producers from short-term price volatility but they are typically not accessible in low-income countries in the Asia-Pacific Region. Commodity exchanges and futures markets have been established in China, India and Thailand but the establishment of such instruments is dependent on good financial and legal institutions (World Bank, 2007). It is argued that governments should facilitate the private sector's adoption of measures such as warehouse receipts and the purchasing of futures and option but such market instruments are themselves dependent on integrated markets and may not be accessible to small-scale farmers in the Asia Pacific Region.

activities are intended to boost agricultural production by enhancing market access and soil fertility. One risk with public works is that participation may force smallholders to divert their labour away from vital own-farm activities such as weeding, especially if employment is offered during periods of high agricultural activity, which is also the 'food insecure season'. This creates a trade-off between social protection for immediate consumption needs and longer-term returns to agriculture (McCord, 2005).

The challenge of reducing vulnerability of small farmers to seasonal variations in agricultural production, food availability, prices of food and asset and demand for labour through timely and appropriate social protection interventions to mitigate such stresses is significant for the Asia Pacific region.

(c) Predictability and risk-taking

Nowhere are the synergies between social protection and agricultural policies more powerful than in the area of risk reduction. Predictable and regular social protection mechanisms (like cash transfers, seasonal public works, and insurance schemes) can influence productivity by stimulating risk-taking behaviour (Holzmann and Jorgensen, 1999; Devereux, 2002a). If transfers are predictable and are perceived as a secure source of income, risk-averse households will be more willing to increase investment in productive activities, even in the presence of risk, because predictable cash transfers provide a form of 'safety net' insurance against future shocks (Gertler *et al.*, 2005).

The 'Employment Guarantee Scheme'¹⁷ in Maharashtra State, India, provided low-waged unskilled manual labour for anyone in rural areas who requested it. The guarantee of paid work served an insurance function, releasing scarce resources that were previously used as precautionary savings to more productive purposes. Farmers in Maharashtra started planting more of higher-yielding (as against drought-tolerant) crop varieties than farmers in neighbouring states (Ravallion, 2003) after the introduction of the Employment Guarantee Scheme'. However, there is still little understanding concerning the magnitude of such insurance effects on risk-taking behaviour (Dorward *et al.*, 2006).

Box 6. Insuring against adverse weather

Weather-based index insurance can sometimes substitute for traditional crop insurance. Weather-based index insurance uses objectively defined trigger events (e.g., rainfall, soil moisture) in an area to set contingent damage payments according to an index. Contracts and indemnity payments are the same for all buyers per unit of insurance; there is no use of field- or household-specific damage and loss data. This model discourages moral hazard and cheating, avoids adverse selection problems, and lowers transaction costs. It also makes the insurance instrument accessible to the broader rural population (Skees *et al.*, 2002). However, index insurance weakens the correlation between losses and payouts. This is known as 'basis risk'—an insured party may suffer a loss yet not receive a payout.

Weather insurance through index-based insurance for farmers and for local and national governments is finding growing use but is not a panacea: it may not be appropriate for slow-onset climate impacts, preventing losses is sometimes more cost effective than loss-based insurance. (Alderman and Haque, 2007). Additionally many countries in A-P Region lack insurance markets and may not find insurance easily affordable. It may also not be desirable for some developing countries to take out insurance if indemnities are likely to crowd out concessional emergency funding. This being said, it may be noted that many humanitarian crises are caused by factors other than climatic variability (e.g., conflict, poor governance, lack of infrastructure, political and macro-economic crises, etc.). Safety net and emergency responses thus should not be tied exclusively to index instruments.

Insurance mechanisms also have the positive effects of ensuring predictability and encouraging risk-taking. Most smallholders do not have access to crop insurance, which means that shocks like weather-induced harvest failure lead inevitably to loss of agricultural output and productive assets, which could be prevented if accessible insurance markets or social insurance mechanisms were in place. Crop insurance for smallholders has failed for a number of reasons: high transaction costs, moral

¹⁷ This scheme is the precursor of the National Rural Employment Guarantee Act of 2005, in India.

hazard, adverse selection, covariate risk and delayed payouts (Alderman and Haque, 2007; Hellmuth *et al.*, 2007), all of which make private crop insurance economically unviable for insurers and inaccessible or unresponsive to client needs (IISD, 2006).

Thus there is a move towards 'weather-indexed' insurance where the insurance is against a local index, say, rainfall shortage or days of hailstorm or snow or frost, which are correlated with harvest outcomes. (See Box 6). Under the 'weather-indexed insurance', farmers get paid compensation if the index reaches a 'trigger' level, without reference to crop losses. Indexed-based weather insurance can play both a protective and productive function. Because payments are disbursed rapidly, farmers are able to smooth their consumption following a poor harvest, while avoiding damaging coping strategies such as selling productive assets. Since households and farms covered by weather-indexed insurance are credit-worthier, investment in productive assets and higher-yielding crops is also promoted (Mechler *et al.*, 2006). However, the main challenge to the widespread adoption of weather-indexed insurance' is their high costs and on a commercial basis, premia may too high for smallholders which is why their financing should partake the nature of a social protection measure.

X. Social protection and climate change

We have explored elsewhere how climate change have affected and will affect large number of people in the Asia-pacific region. For instance, in Bangladesh an increase in sea level of 1 metre would lead to the inundation of 15-18 per cent of the country's landmass and by the year 2050 some 30 million people could become environmental refugees UNDP, 2007. Pacific islands countries and Maldives are at particular risk from rising sea levels. In fact, a rise in water stress is also likely to affect 185 million to 1 billion people in South and South-East Asia (IPCC, 2007). The region will face significant socio-economic impacts because of geographic exposure, reliance on climate sensitive sectors, low incomes, and weak adaptive capacity (Stern, 2006; IPCC, 2001 and 2007; UNDP, 2007).

The United Nations Convention to Combat Desertification (UNCCD) notes that Asia-Pacific contains some 1.7 billion hectares of arid, semi-arid, and dry sub-humid land, with degraded areas including the expanding deserts in China, India, Iran, Mongolia and Pakistan, the steeply eroded mountain slopes of Nepal, and the deforested and overgrazed highlands of the Lao People's Democratic Republic.¹⁸ Since dry-land agriculture constitutes a large proportion of food production in the Asia Pacific region, the projected decline in agricultural productivity and other natural resource-based livelihoods will trigger, *inter alia*, relatively large income losses and food insecurity. If business as usual continues, climate change will change the pattern of shocks faced by households in A-P Region toward more and more frequent covariate shocks (like floods, droughts and hot spells), greater uncertainty about the shocks and interactive shocks, all of which posing significant challenges to coping mechanisms of people at all levels.

As we have mentioned earlier, managing climatic shocks, especially the idiosyncratic ones, have traditionally been the responsibility of households with little external support for managing common climatic shocks such as localized floods, pest attack or crop failures. This may have to change. Large and repetitive covariate climatic events could overwhelm the risk coping capacity of many community institutions. Furthermore, in case of community responses, household and community adaptation is not always equitable, sustainable, or desirable and without external support, many poor households and communities will choose adaptation strategies that are inequitable, unproductive, or asset-degrading. It

¹⁸ UNCCD (2009), Combating Desertification in Asia: Fact Sheet 12; <http://www.unccd.int/publicinfo/factsheets/showFS.php?number=12>.

is true that there are unresolved issues surrounding the design of external support for adaptation, both on governance and on design to ensure support for pro-poor local climate action. But they have to be resolved sooner than later. Efforts to enhance community resilience need to feature more prominently in the response to climate change induced food insecurity. And social protection interventions hold promise for this purpose (Heltberg, Jorgensen, Siegel, 2008; IDS, 2007). Adaptation responses have to span a range of sectors and draw on a variety of approaches and disciplines. And while some responses must be at national or international level (like development of new crop technologies), other responses need to be very local (like adoption of new crops or water saving techniques). Thus, a key challenge is to identify the most effective instruments of social protection to support adaptation and deploy them at the right level. Arguably, community-based adaptation could become the most important element of the adaptation response, where social protection could contribute as it can to national-level responses. Catastrophe safety nets should be put in place. Because the benefits and challenges of catastrophe safety nets are uncontested, they commend themselves as it is now agreed that even subsidized insurance systems are preferred to post-disaster aid, and because the reinsurance market in the Region is not yet prepared to commit sufficient and affordable capital to markets serving the poor. In so doing Governments must ensure that catastrophe safety nets are closely coupled with a risk management programs including a vulnerability assessment.

Box 7. The Munich Climate Insurance Initiative

The Munich Climate Insurance Initiative (MCII) has proposed a two-pillar international risk-management program (financed fully by Annex 1 countries) as part of a comprehensive adaptation strategy that enables risk management and insurance through the funding of a global adaptation strategy. A risk prevention pillar would directly support risk-reduction measures. A two-tiered insurance pillar would address high and medium layers of risk (see figure). The first tier takes the form of a Climate Insurance Pool (CIP) that indemnifies victims of extreme catastrophes in non-Annex 1 countries by a percentage of their losses. A second tier takes the form of a Climate Insurance Assistance Facility and provides support to enable micro and national insurance systems to offer cover for middle-layer risks in vulnerable developing countries. The support includes providing technical assistance, capacity building, and possibly absorbing a portion of the insurance costs. Low-level risks would continue to be absorbed fully by respective governments and the private sector.

The MCII two-pillar proposal meets the challenge of providing support to promote sustainable, affordable, and incentive-compatible insurance programs for vulnerable households, small and medium businesses, and governments in the developing world, and at the same time enabling private sector involvement. Because of the substantial economies of pooling public and private sector risks, there are strong arguments for creating facilities, like the CIP, at the global or regional scale.

Source: "Insurance Instruments for Adapting to Climate Risks: A proposal for the Bali Action, Plan, Version 2.0," MCII Submission to the 4th session of the Ad Hoc Working Group on Long-Term Cooperative Action under the Convention (AWG-LCA 3), Poznan 1–13 December, 2008.

XI. Governance and the provisioning of food

Overall, the effectiveness of social protection interventions in enhancing food security is dependent on various factors, which are country specific. As with many issues in the social sector, political will holds the key to protect the vulnerable and establish interventions, which fit within the general rubric of sustainable and equitable socio-economic development. Social protection programmes that are adopted to deal with food insecurity should depend largely on local and country contexts. Whatever system is chosen, it is vital to have effective administration, institutional set up and governance.

Indeed food insecurity is exacerbated by poor governance¹⁹. Many actors are involved in governance, though in the context of ensuring food security, Governments should play the main role,

¹⁹ The concept of 'governance' relates to the process of decision-making and the process by which decisions are (or are not) implemented.

given that without Government interventions vulnerable groups suffer disproportionately more from food insecurity. Good governance has eight major characteristics in that it is: participatory, consensus oriented, accountable, transparent; responsive, effective and efficient, equitable and inclusive, and subject to rule of law (ESCAP, 2008b). One of the most important starting points for judging good governance at the national level is a Government's performance in providing basic public goods to all of its citizens, including those in rural areas (Paarlberg, 2002). In Asia and the Pacific it is in such places that the eight major characteristics of good governance are hardest to fulfil so as to bring about food security. International trade and forces beyond national boundaries play a significant role in ensuring food security; nevertheless, domestic policies constitute the bedrock of action for enhancing food security for all. Time has come for the countries of the Asia-Pacific region to be cognizant of these characteristics of good governance and take steps towards achieving them.

For the purpose of food security, another key challenge in the Asia-Pacific region is that the numerous vulnerable households are in communities and countries that have the weakest institutional capacity and resource base to respond. To address the challenge of food insecurity additionally requires responsive and accountable institutions to ensure that food insecurity faced by people is addressed effectively. Interventions are unlikely to meet with success unless institutions can demonstrate accountability and responsiveness. These are the areas that are weak in many countries and territories of the region. The challenge is to establish effective institutions – from legal ones to those providing credit and from training establishments, including those instilling behavioural change, to the norms and practices of communities – to enable the participation of all in the development processes including those encompassing issues relating to ensuring food security.

One weakness in Governments' ability to respond to food insecurity relates to poor horizontal coordination within Government structures. As food security touches on a range of issues – land, agriculture, social welfare, water, environment and trade, to name a few – if ministries that deal with issues such as food and agriculture, fisheries, rural development, land, health, social welfare, disaster management, trade and others, are not well coordinated, inefficiencies and inequities will result. Jean Ziegler, the former Special Rapporteur of the Human Rights Council on the Right to Food, in his last report (2008) emphasized the lack of coherence in policies implemented by some specific Governments in Asia and the Pacific as well as other regions²⁰ and though policies on issues relating to food security were in place, there appeared to be no comprehensive strategy fully addressing issues of food security in terms of access to food.²¹

XII. Conclusions

Not enough has been done to ensure food security through interventions that improve food accessibility and promote development for all. The right to food is a basic human right; however, millions of people across Asia and the Pacific, especially socially marginalized groups, suffer from food insecurity which itself puts them at risk of greater poverty and ill health, though progress has been achieved in reducing the number of people in food insecure state in the aggregate. These particularly vulnerable groups also suffer from fewer and inferior employment opportunities, as well as greater discrimination in various dimensions. Women are often discriminated against and this can be

²⁰ In that report, he also states that refugees from hunger are among the most excluded and discriminated people and are also among those who suffer most from the lack of coherence in States' policies. He argues that to be coherent, States must extend legal protection to protect people fleeing from hunger and other severe violations of their right to food.

²¹ See the report on his mission to Mongolia (E/CN.4/2005/47/Add.2).

exacerbated by belonging to a particular caste, being a widow or having HIV/AIDS or a disability. Continued high population growth in some countries and large aging populations in others, bringing about high dependency ratios, mean that food availability and access are likely to become increasingly important issues. Migration and urbanization also pose significant challenges to food security, as do gender inequalities within households.

Food insecurity is exacerbated by poor institutional set ups and poor governance. Interventions are unlikely to meet with success unless institutions can demonstrate accountability and responsiveness. These are the areas that are weak in many parts of the region. Poor co-ordination within Government structures, including ministries that deal with diverse issues, results in reduced ability to respond to food insecurity as well as inefficiencies and inequities. This is especially relevant when considering the role of social protection and how, when there is good governance and other factors that promote inclusive development, food security can be enhanced. Issues concerning how social policies and social protection can work to reduce food insecurity are covered in the recommendations below.

Social protection measures need to be counter cyclical and not pro-cyclical, as is normally the case. Social policy-related issues need to be effectively integrated into all policies and interventions that seek to address food insecurity, especially those dealing with economic factors. The challenge is to persuade Governments to adopt multi-sectoral approaches that entail horizontal coordination between different Ministries, include various stakeholders and accord to the principles of good governance, as well as take into account sub-national and national idiosyncrasies should be adopted.

Co-operation at the regional level can be an effective means of preventing and reacting to crises. Regional action can also involve investments in effective establishment of regional agricultural insurance, e.g. crop and cattle insurance (Deacon, Ortiz and Zelenev, 2007).

However, social protection programmes have intended and unintended gender implications. For example, conditional cash transfer programmes, which are based on the concept of 'co-responsibility', may impose unintended demands on over-worked mothers (in poorer household especially) who more often than not have the responsibility of meeting conditionalities such as ensuring that children attend school and clinics. Apart from reinforcing 'traditional' gender roles, these conditions can displace women's labour from farming or income-generating activities. Similarly, efforts to target women in public works projects by setting gender quotas can lead to 'perverse effects', if women who are already 'time-poor' and over-burdened are obliged to increase their workload in order to access social transfers (Devereux, 2002b).

There is evidence that the outcome of targeting women with transfers yield better results, because in many countries men have a higher propensity to spend incremental income on themselves, while women have a higher propensity to allocate incremental food or cash to their families, especially their children (Haddad *et al.*, 1997). If, however, the objective of a safety net programme is to raise household productivity and incomes, the case for targeting individuals who own and work with productive assets may be stronger. For instance, if women have no access to land and men are responsible for ploughing, a programme that transfers draught bullock for ploughing if targeted at men rather than women, would maximize synergies between social protection and agricultural productivity, till such time as the institutional arrangements are not changed so that ownership rights over productive resources are vested in women at par with men.

XIII. Recommendations

AA. Bring to bear the full force of the long arms of the State for the food security of special groups. There are marginalized groups like people with disabilities, people living with HIV/AIDS, ethnic minorities, elderly, widows, small farmers, migrants, internally displaced persons and women, who must have the protection of the state for food security. Towards that end the governments may on apriority basis:

- Tackle the seven food insecurities faced by women, through multi-sectoral programme of, inter alia, social protection, affirmative actions, changing laws relating to inheritance and ownership of productive resources and making right to food, education and health care for women constitutional rights.
- Undertake *ex ante* management of Covariate Shocks²² by boosting coping strategies of those at risk of suffering Covariate Shocks through installation of insurance and insurance-like programs with flexible targeting, flexible financing, and flexible implementation arrangements, before the onset of natural disasters.
- Eliminate gender based inequalities
 - o By adopting an agent-oriented approach to the women's agenda and regarding women as potentially active agents of major social change rather than as solicitors of social equity.
 - o By creating an enabling environment for "co-operative conflict" between genders and devise ways and means to be resolved amicably.
 - o Taking for affirmative action including reservation of seats in all Legislatures and Parliament for women as a fair outcome and realization of the benefits of law.
- Provide Social Protection to migrants by establishing bilateral agreements for minimum standards for the migrants' protection, wages, access to health services and explore ways and means to regularize migration across borders.
- Provide guaranteed employment for marginalized groups and people who face discrimination on the basis of sex, race, religion, caste, ethnicity, disability and communicable diseases, who are often among the poorest of the poor, commensurate with their needs, noting that employment guarantees are among the best forms of *de facto* insurance²³ for the marginalized groups.

Box 8. Singapore offers migrants some help

"Singapore is setting up a migrant workers centre to help foreign workers who are in disputes with their employers and can be stranded without wages, food and shelter. The Center to be opened by April (2009) is to be guided by the Migrant Worker Forum, an enterprise of the state-backed National Trade Union Congress and Singapore National Employers Federation. Singapore employs 757000 foreign workers. An increasing number of cases have surfaced of workers left unemployed without food, shelter and health care".

Source: *Bangkok Post*, 15 February 2009, p.7.

BB. Provide Widespread protection against idiosyncratic shocks: Given that food insecurity is often wrongly thought as being caused by only covariate shocks while much of food insecurity is caused by idiosyncratic shocks, Governments of the countries of the region may take measure to reverse the situation through:

²² Covariate Shocks are those shocks which affects everyone in a community or area.

²³ Such as public employment guarantee schemes (EGS) exemplified by food-for-work (FFW) or cash-for-work projects.

- Provisioning for *de jure* and *de facto* insurance for idiosyncratic shocks including through:
 - o more effective, ubiquitous and continuing insurance programs, whether through *financial innovations* such as micro-insurance or *index insurance schemes* and *community-based health insurance programmes*
 - o *de facto* insurance via, for example, supporting community based responses, public employment guarantee schemes (EGS) like the National Rural Employment Programme in India, underpinned by food-for-work (FFW) or cash-for-work projects as a means of protecting vulnerable people from idiosyncratic shocks like sudden loss of valuable and productive assets, unexpected income loss or other adverse effects²⁴.
- Protecting the common property resources (CPRs) which constitute the Secondary Food System²⁵ and act as insurance, for the vulnerable groups and ethnic minorities who need the support of the State, against temporary food insecurity and smoothing consumption, through:
 - o Establishing a robust system for management of common property resources, forests, water bodies and bio diversity, including joint management by all the stakeholders, to ensure that while these resources continue to contribute to food security, they are not misused or over used and properly conserved.
 - o Recognizing the usufruct and traditional property rights of the common people to CPRs in a new set of laws regulating the use of common property resources, duly enforced.
 - o Building and reinforcing local institutions, especially informal social safety nets and indigenous NGOs as reliable channels for food distribution and as forms of social protection.

²⁴ Jalan and Ravallion 1999, Barrett *et al.*, 2004.

²⁵ Adding vital nutrients as also by providing supplementary food to common people.

References

- Abbott, D. and S. Pollard (2004). *Hardship and Poverty in the Pacific* (Manila, Asian Development Bank).
- Abdulai, A., Barrett, C. and Hoddinott, J. (2004). "Does food aid *really* have disincentive effects? New evidence from sub-Saharan Africa" (Ithaca, NY, Cornell University).
- Ahmed, A. and Caldes, N. (2004) 'Food for Education: A review of program impacts' (Washington, International Food Policy Research Institute).
- Agarwal, Bina, "The Links between Environmental Wealth and Gender Justice", accessed on 7 October 2008 from: <http://onthecommons.org/content.php?id=842>.
- Agarwal, Bina. 2008. "Rethinking Collectivities: Institutional Innovations in Group Farming, Community Forestry and Strategic Alliances", B.N. Ganguli Memorial lecture, 11 April 2007. Occasional paper, Center for Study of Developing Societies, Delhi.
- Asia Times (2008), *Gulf States Covet Asian Farms*, accessed on 4 October 2008 from: www.Khilafa.com.
- Asian Migrant Centre (2003). *Asian Migrant Year Book 2002-2003* (Hong Kong, China, co-published by the Asian Migrant Centre and the Migrant Forum in Asia).
- Barahona, C. and Cromwell, E. (2005) "Starter Pack and Sustainable Agriculture", in S. Levy (ed.), *Starter Packs: A Strategy to Fight Food insecurity in Developing Countries? Lessons from the Malawi Experience 1998-2003* (Wallingford, CABI Publishing).
- Barrett, C. (2006) "Food Aid's Intended and Unintended Consequences", Background Paper for *State of Food and Agriculture 2006* (Rome, FAO).
- Barrett, C. and Maxwell, D. (2005) *Food Aid after Fifty Years: Recasting Its Role*, London, Routledge
- Bellin-Sesay, F. (2003). *Overview on Current HIV/AIDS in Asia: Some Implications for Food and Nutrition Security*. Malaysian Journal of Nutrition, 9 (2). pp. 75-84.
- Barrett, Christopher B., Christine M. Moser, Oloro V. McHugh, and Joeli Barison. (2004). "Better Technology, Better Plots or Better Farmers? Identifying Changes in Productivity and Risk among Malagasy Rice Farmers", *American Journal of Agricultural Economics*, Volume 86, No. 4, pp. 869-888.
- Bollier, David, "Bina Agarwal: The Links between Environmental Wealth and Gender Justice", 22 May 2006, accessed from: <http://onthecommons.org/content.php?id=842>, on 7 October 2008.
- Brahmbhatt, M. and L. Christiaensen (2008). *Rising Food Prices in East Asia: Challenges and Policy Options* (Washington DC, World Bank).
- Carter, M. and Barrett, C. (2007). "Asset Thresholds and Social Protection: A 'Think-Piece', *IDS Bulletin*, 38(3): 34-38.
- Chambers, R., Longhurst, R. and Pacey, A. (eds.) (1981). *Seasonal Dimensions to Rural Poverty* (London, Frances Pinter).
- Coll-Black, S. and Devereux, S. (2007). "Review of Evidence and Evidence Gaps on the Effectiveness and Impacts of DFID-supported Pilot Social Transfer Schemes", *DFID Social Transfers Evaluation* (Brighton, Institute of Development Studies).
- Coulter, J., Walker, D. and Hodges, R. (2007) "Local and regional procurement of food aid in Africa: impact and policy issues", *Journal of Humanitarian Assistance*.

- Cromwell, Elizabeth and Slater, Rachel (2004). *Food security and social protection*, paper produced for DIFID, September.
- De Souza, Roger-Mark, Williams, John S. and Meyerson, Frederick A.B. (2003) "Critical links: population, health and the environment", *Population Bulletin*, September, vol. 58, No. 3.
- Deacon, Bob, Ortiz, Isabel and Zelenev, Sergei (2007). *Regional Social Policy*, DESA Working Paper No. 37 (ST/ESA/2007/DWP/37, June).
- Dercon, S. and Krishnan, P. (2000). "Vulnerability, Seasonality and Poverty in Ethiopia", *Economic Mobility and Poverty in Developing Countries*, 36(6) 25-51.
- Devereux, S. (2002a). "Can Social Safety Nets Reduce Chronic Poverty?" *Development Policy Review*, 20(5): 657-675.
- Dorward, A. (2006). "Markets and pro-poor agricultural growth: insights from livelihood and informal rural economy models in Malawi", *Agricultural Economics*, 35(2): 157-169.
- ESCAP (2007), *Statistical Yearbook for Asia and the Pacific 2007*, Bangkok, UNESCAP, p. 37.
- ESCAP (2008a). *2008 ESCAP Population Data Sheet*, Bangkok, UNESCAP.
- ESCAP (2008b). What is Good Governance? Accessed on 9 October 2008 from: www.unescap.org/pdd/prs/ProjectActivities/Ongoing/gg/governance.asp.
- ESCAP (2009), Social Policy and Population Section, Disability Programme; <http://www.unescap.org/esid/psis/disability/index.asp>
- ESCAP (2008c). *Economic and Social Survey of Asia and the Pacific 2008: Sustaining Growth and Sharing Prosperity*, New York, ESCAP.
- ESCAP/ADB/UNDP (2008). *A Future within Reach 2008: Regional Partnerships for the Millennium Development Goals in Asia and the Pacific* (New York, ESCAP/ADB/UNDP).
- FAO (2005). *Rural women and food security in Asia and the Pacific: Prospects and paradoxes* (Bangkok, FAO Regional Office for Asia and the Pacific).
- FAO (2008a). "The Impact of Rising Food Prices on the Poor", ESA Working Paper No. 08-07, August (Rome, FAO).
- FAO (2008b). *The State of Food Insecurity in the World 2008* (Rome, FAO).
- Financial Times (2008). "UAE to invest in Kazakh agriculture", 16 July.
- Gillespie, S. and S. Kadiyala (2005). *HIV/AIDS and Food and Nutrition Security: From Evidence to Action* (Washington, D.C., International Food Policy Research Institute).
- Grain (2008). "Seized: The 2008 land grab for food and financial security". Accessed on 28 October 2008 from: <http://www.grain.org/front/>.
- Gulfnews (2008). *Dubai equity firm buys agricultural land in Pakistan*, 13 May 2008 Accessed on 27 August 2008 from: <http://www.gulfnews.com/BUSINESS/Investment/10212801.html>.
- Howell, F. (2001). "Social assistance: Project and program issues", in *Social Protection in Asia and the Pacific* (Manila, ADB).
- High-level task force on the global food crisis (2008). *Comprehensive framework for action* (United Nations, July), accessed on 3 September 2008 from: www.un.org/issues/food/taskforce/docs.html.
- IFAD (1999). *Rural Poverty Assessment: Asia and the Pacific Region* (Draft for Discussion). Rome, IFAD.
- IFAD (2008). *Making a Difference in Asia and the Pacific Newsletter* No. 21, June-July. Accessed from <http://www.ifad.org/newsletter/pi/21.htm> on 15 January 2009.
- IFAD (2008). *Food Prices: Smallholder Farmers Can Be Part of the Solution*, fact sheet, (Rome, IFAD)

- ILO (2004). *A Fair Globalization: Creating Opportunities for All* (Geneva, ILO).
- ILO (2005). *The dynamics of the labour market and employment in Bangladesh: A focus on gender dimensions* (Geneva, ILO).
- ILO (2008a) *Global Employment Trends for Women 2008* (Geneva, ILO).
- ILO (2008b) *Global Wage Report 2008/09: Minimum wages and collective bargaining: Towards policy coherence* (Geneva, ILO).
- IPCC (2007). *Climate change 2007: mitigation*. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, accessed on 15 July 2008 from: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-frontmatter.pdf>.
- Inter-Press Service, Q&A: Women Do Most, With Least Assistance: Interview with Lennart Båge, President of the International Fund for Agricultural Development, 14 August 2008. Accessed on 12 November 2008 from: <http://ipsnews.net/news.asp?idnews=43554>.
- Jalan, Jyotsna and Martin Ravallion (1999). *Are the Poor Less Well Insured? Evidence on Vulnerability to Income Risk in Rural China*. Policy Research Working Paper 1863 (Washington, DC: World Bank).
- Kabeer, N, Sharma Alakh N, Upendranadh C (2006). *Social Security in South Asia: Issues and Perspectives (Mimeo) unpublished paper available at* <http://ids.ac.uk/index.cfm?objectid=FA0BAB83-5056-8171-7BBFD2F0BFD2F036>.
- Kapsos, S. (2008). *The gender wage gap in Bangladesh*. ILO Asia-Pacific Working Paper Series, (Bangkok, ILO Regional Office for Asia and the Pacific).
- Kelkar, Govind (2007). *Feminization of Agriculture in Asia*, 24 December. One World Net, accessed on 15 January 2009 from: <http://archive.oneworld.net/article/view/156365>.
- Lao Women's Union and Gender Resource Information and Development Center (2004). *Gender, Forest Resources, and Rural Livelihood* (Vientiane, Lao Women's Union).
- Li, Zongmin (2003). "Women's Land Tenure Rights in Rural China: A Synthesis", Mimeo, Beijing, Ford Foundation).
- Loevinsohn, M., and S. R. Gillespie (2003). *HIV/AIDS, Food security and rural livelihoods: Understanding and responding*. Food Consumption and Nutrition Division Discussion Paper 157 (Washington, D.C., International Food Policy Research Institute).
- McCord, A. (2005). 'Win-win or lose-lose? An Examination of the Use of Public Works as a Social Protection Instrument in Situations of Chronic Poverty', Paper for presentation at the Conference on *Social Protection for Chronic Poverty* (Manchester, Institute for Development Policy and Management, University of Manchester).
- Navasranjan (2008-2009). *Who are Dalits?* accessed from the web on 5 February 2009, <http://navasranjan.org/navasranjan/dalits/whoaredalits>
- Olimova, S. (2005). *Impact of External Migration on Development of Mountainous Regions (2005)*, Paper prepared for a workshop on Strategies for Development and Food Security in Mountainous Areas of Central Asia, held Dushanbe, Tajikistan, 6-10 June.
- Paarlberg, R. (2002). International Food Policy Research Institute, 2020 Brief No. 72, Governance and Food Security in an Age of Globalization.
- Pitayanon S., S. Kongsin and W.J. Janjarean (1997). The economic impact of HIV/AIDS mortality on households in Thailand. In: *The Economics of HIV and AIDS: The Cases of South Africa and South-East Asia*. UNDP, Bloom, D. and P. Goodwin, eds. (Delhi, Oxford University Press).

- Piwoz, E. and E. Preble (2000). HIV/AIDS and nutrition. A review of the literature and recommendations for nutritional care and support in Sub-Saharan Africa SARA Project. (Washington DC, US Agency for International Development).
- Ravallion, M. (2003). "Targeted Transfers in Poor Countries: Revisiting the Tradeoffs and Policy Options," *Policy Research Working Paper*, 3048 (Washington DC: World Bank).
- Roncarati, M. and Taoprasert, Y. (2000). "Challenges facing Mor Muangs' Beliefs and Practices on Maternal and Child Health". In *Indigenous Knowledge and Practices on Mother and Child Care: Experiences from Southeast Asia and China*, Philippines, International Institute of Rural Reconstruction, PLAN International and Save the Children Federation, Inc.
- Sen, A. (1986). *Poverty and famines: An Essay in Entitlement and Deprivation* (Oxford, The Clarendon Press).
- Sen, A. (1997). *Hunger in the Contemporary World*, London, The Suntroy Centre and Toyota International Centres for Economics and Related Disciplines, London School of Economics and Political Science, Discussion Paper DEDPS/8 (retroactively created in June 2002 of the paper originally, published in November 1997 as DERP No.8).
- Sen, Amartya (2001). "Many Faces of Gender Inequality", *Frontline*, Volume 18, Issue 22, Oct. 27 - Nov. 2009.
- Shrestha, Anita (2003). *Dalits in Nepal: Story of Discrimination* accessed on 5 February 2009, http://www.hurights.or.jp/asia-pacific/no_30/04.htm.
- Studdert, L., Soekirman, K. and Habicht, J. (2004). "Community-based school feeding during Indonesia's economic crisis: Implementation, benefits, and sustainability," *Food and Nutrition Bulletin*, 25(2): 156-165.
- Tan Yingzi and Xin Dingding (2009). "20 million migrants lost jobs: Survey", *China Daily*, 3 February, p. 1.
- Taylor, J. and Yunez-Naude, A. (2002). "Farm/non-farm linkages and agricultural supply response in Mexico: a village-wide modelling perspective", Chapter 2 in B. Davis, T. Reardon, K. Stamoulis and P. Winters (editors), *Promoting farm/non-farm linkages for rural development: Case Studies from Africa and Latin America* (Rome, FAO).
- The Economist, 24 January 2008. *The Starvelings*.
- UNAIDS and WHO (2007). *AIDS epidemic update: December 2007* (Geneva, UNAIDS and WHO).
- UNDP (2007). Regional Centre in Colombo, *Climate Change and the MDGs in Asia Pacific: Challenges and Opportunities, Inside Asia Pacific* Volume 2, Issue 2 (July 2007), accessed on 22 October 2008 from http://www.undprcc.lk/rcc_web_bulletin/Issue2/country_Bangladesh.shtml.
- UN-HABITAT (2008). *Urban World*, Number 1, November (Nairobi, UN-HABITAT)
- UNFPA (2007), Upholding the Full Spectrum of Indigenous Peoples' Rights; Ms. Rena Doña, Assistant Representative; Conference on the International Day of the World's Indigenous Peoples, 9 August 2007. <http://www.unfpa.org.ph/speeches/upholding-full-spectrum-indigenous-peoples-rights>
- UNICEF (2006). Progress for Children: A Report Card on Nutrition, Number 4, May, p. 12
- UNICEF (2008). Progress for Children: A Report Card on Maternal Mortality, (New York, UNICEF), p.32.
- UNICEF, UNAIDS and WHO (2008). *Children and AIDS: Second stocktaking report* (Geneva; UNICEF, UNAIDS and WHO).
- United Nations (2006). *Trends in Total Migrant Stock: the 2005 Revision* (CD ROM) (United Nations publication, Sales No. 06.XIII.8).

- United Nations (2007). *World Population Prospects: The 2006 Revision*, (New York, United Nations Population Division).
- United Nations University (UNU), 2007. Vitamin and mineral deficiencies technical situation analysis: a report for the Ten Year Strategy for the Reduction of Vitamin and Mineral Deficiencies. *Food and Nutrition Bulletin*, vol. 28, no. 1 (supplement). Tokyo, United Nations University Press.
- Upendranadh C (2007): "Social Protection in India – Experiences from Transfer Mechanisms" Paper presented at the International Seminar on "Evolution and Challenges Facing Conditioned Transfers Programmes" organised by IPC-IG, UNDP, November 20 and 21, 2007, Brasilia Brazil.
- Upendranadh C (2008): "Migration and Social Protection in India: An Agenda for Public Policy" Paper presented at the International Conference on "Social Protection Perspectives on Migration in South and Southern Africa, organized by CICLASS, University of Johannesburg and FES, 27-28th Aug 2008.
- Upendranadh C (2009a): "Public works and Employment Programmes as Social Protection: Experience of National Rural Employment Guarantee Programme in India" Presented at the *Second Conference on Integrated Social Policies* organised by UNDP at Cairo Egypt, 4-5th July 2009.
- Upendranadh C (2009b): "Public Employment Programme for Poverty Reduction: The case of India", Paper presented at the "Global and National Strategy for Poverty Reduction" International Conference Organized by UN Research Institute for Social Development (UNRISD), BK21 Programme, Graduate School of Public Administration (GSPA), Seoul National University, 28-29 September 2009, Seoul South Korea.
- World Conservation Union (IUCN) (2008). *Gender Makes the Difference* Fact sheet on Agriculture, accessed on 6 October 2008 from www.genderandenvironment.org/admin/admin_biblioteca/documentos/agriculture.pdf.
- World Bank (2000/2001). *World Development Report, 2000/2001, Attacking Poverty*, Washington, D.C., World Bank and Oxford University Press.
- World Bank (2006). *Making the New Indonesia Work for the Poor* (Washington, D.C., World Bank).
- World Bank (2007). *World Development Report 2008: Agriculture for Development* (Washington DC, World Bank).
- World Bank (2008a). *Guidance for Responses from the Human Development Sectors to Rising Food Prices*, Human Development Network, World Bank, 21 June, accessed on 3 October 2008 from http://siteresources.worldbank.org/EXTSAFETYNETSANDTRANSFERS/Resources/HD_Response_Food_Prices.pdf?resourceurlname=HD_Response_Food_Prices.pdf.
- World Bank (2008b). Migration and Remittances, accessed on 6 November 2008 from: www.worldbank.org/prospects/migrationandremittances.
- Ziegler, J. (2005). Report of the Special Rapporteur on the Right to Food (E/CN.4/2005/47/Add.2).
- Ziegler, J. (2008). Report of the Special Rapporteur on the Right to Food (A/HRC/7/5).