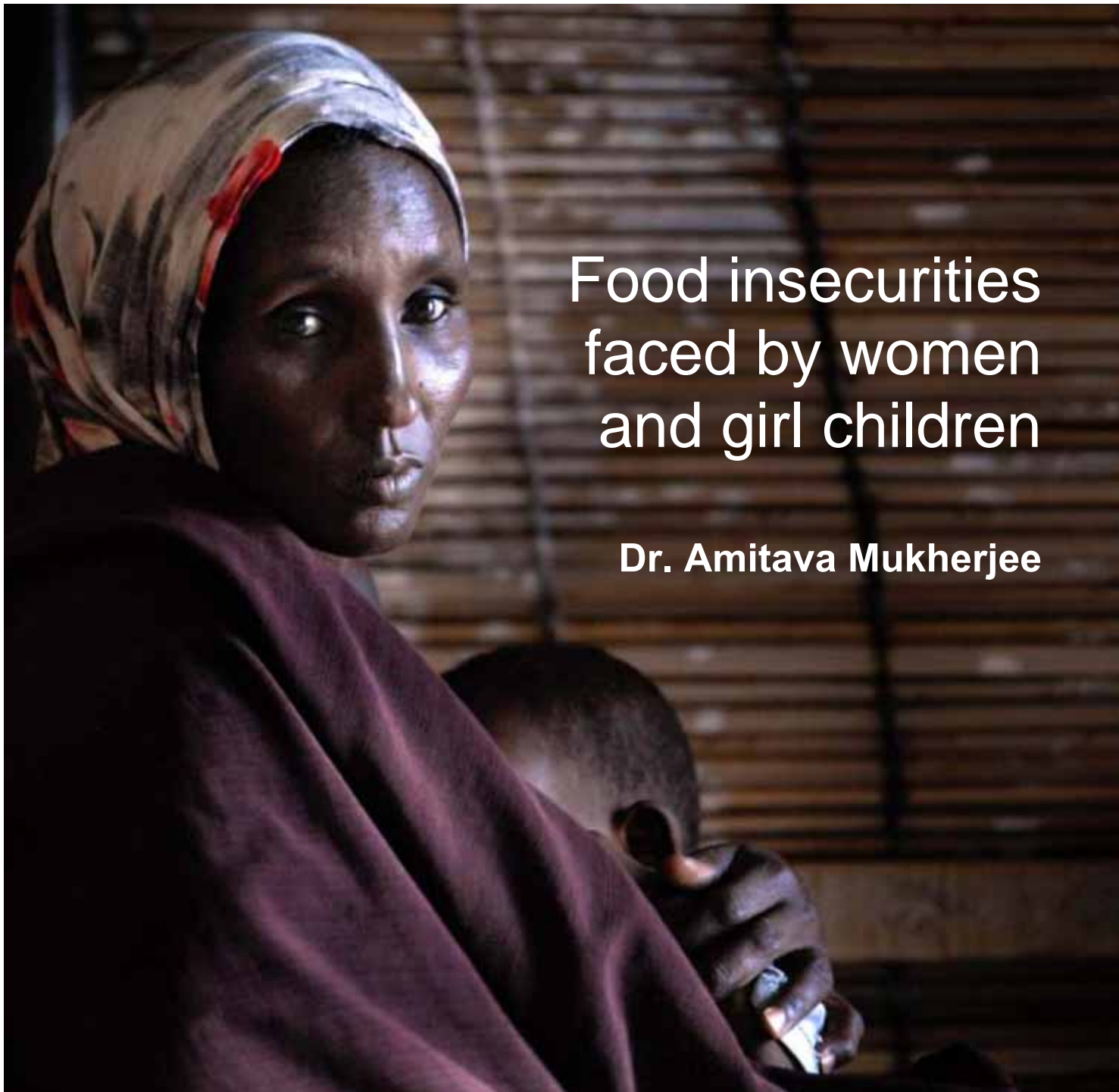


# CAPSA **paper**



Food insecurities  
faced by women  
and girl children

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# Food Insecurities Faced by Women and Girl Children

Dr. Amitava Mukherjee\*

*“A child said, ‘What is the grass?’ fetching it to me with full hands,  
How could I answer the child? I do not know what it is, any more than he.  
I guess it must be the flag of my disposition out of hopeful green stuff woven,  
Or I guess it is the handkerchief of the Lord,  
A scented gift that Remembrancer designedly dropped,  
Bearing the owner’s name somewhere in the corners,  
That we may see and remark, and say ‘whose?’*

Walt Whitman’s, Leaves of Grass

## I. Some conceptual clarifications

The scented gift of the “Remembrancer” has given the world, especially this part of the world, its principal food grains. The grass has given rice, wheat, barley, oats, millets and fodder. They were foods of antiquity. Two crops which have retained their importance from antiquity till today are rice and wheat. The Green Revolution in South Asia as in other parts of the world was primarily aimed at improving productivity of these crops and it did give the region the fruits of modern technology: better seeds, newer forms of fertilizers and more and newer methods of irrigation and ultimately, in consequence, increased availability of food. Yet millions are food insecure in South Asia. Why? Because achieving ‘food security’ means not just ensuring that sufficient food is available in the system, but also that everyone has economic, social, cultural and physical access to it – and failures of access to food, particularly for the most marginal sub-groups of population, are largely hidden from the public view --- and that food has adequate nutritive value. Achieving ‘food security’ also means people have the right physiological condition to absorb and utilize food, which is contingent upon, *inter alia*, access to potable water; availability of promotive and preventive health care. Regrettably many of these elements are missing in most of South Asia because of a wide spectrum of causes: social, economic, financial, military, natural, and “Acts of God”, as it were<sup>1</sup>.

## II. How to monitor food insecurity?

The simplest way of monitoring food security is to look at outcomes – to count how many people are hungry<sup>2</sup>. For this, there are three principal measures. The *first* addresses consumption, typically by estimating the proportion of the population whose food intake falls below the minimum dietary energy requirement of 1,800 calories per day (See Figure 1). The greatest problems are in South and South-West Asia where 21 per cent of the population is undernourished. The country with the most acute

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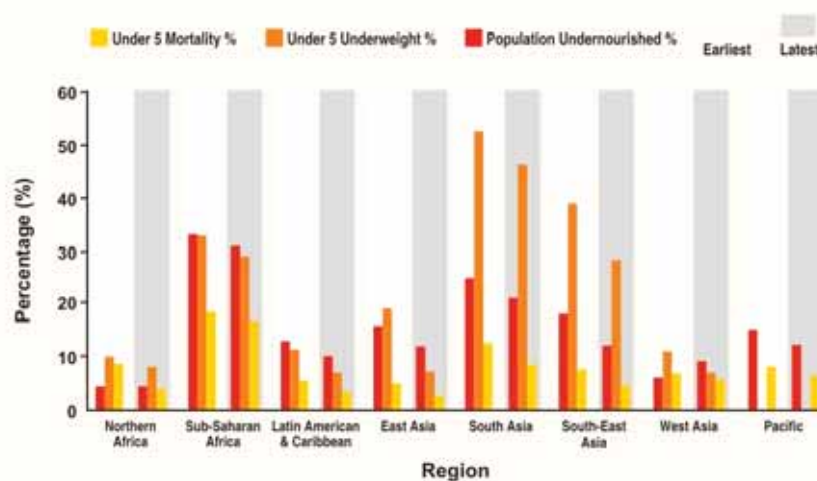
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<sup>1</sup> There has been an explosion of literature on the subject in recent times.

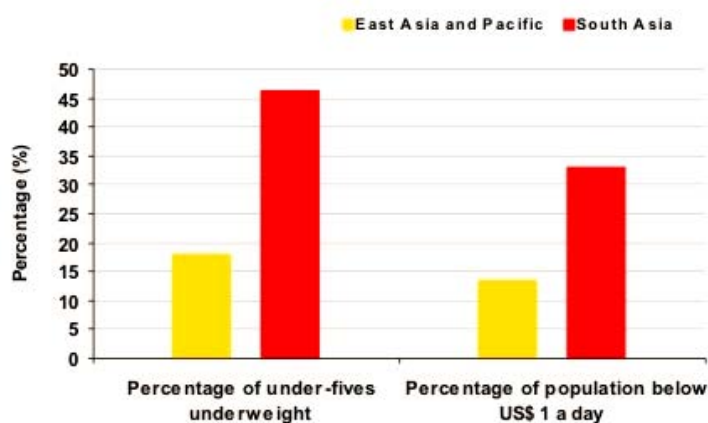
<sup>2</sup> Being hungry and being food insecure are different things. But hunger can be used as a measure of food security.

problems is Afghanistan – where the proportion is more than one third. But, levels of undernourishment are also high – between 20 and 34 per cent – in a number of other countries, including (in descending order of the proportion undernourished) Bangladesh, Pakistan, Sri Lanka and India<sup>3</sup>. The *second* principal way of monitoring food security is by weighing a sample of children to arrive at the proportion who are underweight for their age (See Figure-2<sup>4</sup>). More than half the world’s underweight children, around 79.5 million, live in South and South-West Asia alone<sup>5</sup>, where on average 42 per cent of children are underweight – with the highest figures in Bangladesh, at 47 per cent, and India, at 46 per cent<sup>6</sup>. A *third* way of tracking food insecurity is through the ‘global hunger index’, which is based on a simple average of three indicators: the percentage of the population undernourished; the percentage of under-five children underweight (See Table 1); and the under-five mortality rate (See Figure-1<sup>7</sup>). Of the South Asian countries listed in this index, Afghanistan again has the worst score<sup>8</sup>. These indicators help build up a fairly good picture of malnutrition across South Asia country by country.

**Figure 1 Three indicators of hunger – regional comparison**



**Figure 2 Status and Poverty in Asia and the Pacific**



<sup>3</sup> UNESCAP (2009)

<sup>4</sup> UNDP and FAO (2008)

<sup>5</sup> United Nations (2008)

<sup>6</sup> However, even in South-East Asia, the majority of countries in the sub-region have more than one quarter of their children undernourished.

<sup>7</sup> UNDP and FAO (2008)

<sup>8</sup> UNESCAP (2009)

**Box 1 The hunter, the gatherer, the shopper, the cook**

But I have been cooking all day.  
Standing over a hot stove.  
Slaving over a hot stove.  
Cooking.

I've been shopping for groceries.  
Putting them away.  
Setting the table.  
Cooking the food.  
Making this dinner.  
Wracking my brains.

I've been wracking my brains over this meal.  
What to buy.  
How much to pay.  
I've been budgeting.  
Looking for sales.  
I've been feeding this family on \$ 6.00.  
Making it do. I've been wracking my brains over this meal.

I have been cooking all day.  
Shopping for bargains.  
Hunting for bargains.  
I've been hunting all day.

I've been up and down hundreds of aisles.  
Hunting.  
Hunting and gathering and coking this food.  
Loading my cart.  
Carrying carcasses.  
I have been hunting all day.

I have gathered this food from across the land.  
I've been everywhere.  
I've been everywhere.  
I have made this meal.  
I have created this food.  
This is my time.  
My thought.  
What you have on your plate is my blood.  
My brains.  
I tell you I have been cooking all day.

What do you mean  
you don't want it?

Source: Sondra Segal and Roberta Sklar (1987)

But the aggregate picture at the national level may mask greater food insecurity within the food insecure population. Within the food insecure groups of people, there are two especially food insecure subgroups. *One* is rural children – who are twice as likely to be undernourished as those living in urban areas. Some estimates indicate that children living in rural areas are more than twice as likely to be underweight as compared with children in urban areas. Although in percentage point terms the greatest contrast is in Nepal, there are also strikingly wide gaps in other countries, including India and Sri Lanka. Another important overall distinction is by sex: in South Asia for boys the rate is 44 per cent while for girls it is 47 per cent<sup>9</sup>.

*Second*, are women: in most countries in South Asia there is a persistent gender inequality within households and outside their households. The situation is bleakest for rural women in South Asia. They are often the main food producers – contributing about 65 per cent of total food production<sup>10</sup> and even more (See Boxes-1 and 2). Yet, rural women find it more difficult to get access to a range of resources such as credit<sup>11</sup>, land, agricultural inputs and extension services and employment, both within the community and the household, having obvious bearing on their food security.

In fact women in South Asia face the seven inequalities<sup>12</sup>, having serious implications for their own food security and food security of households, especially children that depend on women for their food security.

<sup>9</sup> UNESCAP (2009). It may be noted that for most countries in Asia, the rates of underweight are the same for both sexes.

<sup>10</sup> Inter-Press Service (2008)

<sup>11</sup> Barring the honourable exceptions provided by borrowers of the Grameen Bank in Bangladesh.

<sup>12</sup> Sen. (2001)

**Box 2 Household work during one week in landless Indian households in South India**

Tasks	Female per cent	Male per cent
Kolam *	38.5	-----
Serving Spouse	40.4	17.6
Childcare	42.3	15.7
Shopping in City	44.2	47.1
Whitewashing	48.1	62.7
Collecting Firewood	65.4	47.0
Local Shopping	69.2	43.1
Wetting the Yard	78.8	05.9
Washing Clothes	82.7	25.5
Cutting/Peeling	88.5	11.8
Fetching Water	88.5	23.5
Cooking	90.1	11.8
Cleaning House	94.2	15.7
Washing Vessels	96.2	5.9

\* Rice powder or powdered chalk is used to make drawing in front of the home.

Source: Bread for the World Institute (1995).

### III. Eight kinds of food insecurities faced by women and girl children

Flowing from the seven inequalities faced by women in South Asia, women and girl children face seven kinds of food securities. These are as follows.

**(1) Mortality based food insecurities:** In some regions in South Asia, inequality between women and men directly involves matters of life and death, and takes the brutal form of unusually high mortality rates of women. In both absolute and relative terms, maternal mortality is highest in the South Asia. With 226,077 deaths, this region accounted for more than two thirds of the maternal deaths in Asia and the Pacific in 2000. Nepal had the highest MMR, at 740, while India and Pakistan also had high levels, at 540 and 500, respectively<sup>13</sup>. These rates are among the highest in the world. 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. This has substantial, bearing on food security of women and children.

Girl children who survive their mothers dying at child birth, are not only denied access to mother's milk and the consequent under-nutrition, but are additionally more vulnerable to denial of adequate nutritious food than male surviving new-borns. Such newborn girl children, denied of mother's care and love, may also suffer from ingesting food and water not fit for infants' consumption, notably water not properly purified or boiled. Additionally such children in general and girl children in particular, would have inadequate access to preventive and elementary education, both of which depend largely on the initiative of the mothers. These deprivations impair the long term capability of such children to access food. Thus mortality based inequalities faced by women, jointly and severally, contribute to higher food insecurity amongst girl children, as also infant and girl child mortality rates.

**(2) Natality based food insecurity:** Given a preference for boys over girls that afflict many male-dominated societies, gender inequality can manifest itself in the form of the parents wanting the newborn to be a boy rather than a girl. With the availability of modern techniques to determine the gender of the foetus, sex-selective abortion has become common in Asia and is beginning to emerge as a statistically significant phenomenon in India and South Asia as well, as a negative fall out of the march of medical science. Some have like UNFPA called this phenomenon "gendercide" while Sen had called it the case of the "missing millions"<sup>14</sup>.

<sup>13</sup> UNESCAP (2007) pp. 31-32

<sup>14</sup> Sen (1990)

If sex-selective abortion does not succeed or is not possible due to structural, institutional or medical conditions, the girl child starts from the womb with familial and parental environments that are hostile to her existence. This leads to infant-girls and women being in a weaker position to be food secure, by suffering from limitations to physical and social access to food. Mother's carrying female foetus, neglect their diet (poor as it is) or are forced to do so, making the foetus even more under-nourished. In harsher societal environments where sex-selective abortion fails, girl children so born are fed a diet, including an excess of mother's milk or excessive salt<sup>15</sup>, so that they do not become their parents' burden. Hark these words: "If the female foetus is lucky enough to survive till her birth then she faced the peril of elimination in infancy by female infanticide. It is defined it as, 'Killing of an entirely dependent girl child under one year of age by mother, parents or others in whose care she is entrusted'<sup>16</sup>. Historically, female infanticide has been in existence since long. Girl-infants have been known to be killed by rubbing poison on the nursing-mother 's breast, by feeding infants with milk of errukam flower or oleander berries, by using sap of calotropis plant, paddy grains, giving sleeping tablets ..... Law banned this heinous practice in 1870, more than a century ago"<sup>17</sup>. Nevertheless such abuse of girl child, which is tantamount to a violation of her right to life continues not only in some parts of Rajasthan and Gujarat but recently has been found in some parts of Tamil Nadu and Maharashtra in India as well<sup>18</sup>.

All these taken one with the other demonstrate the various forms that natality based food insecurities take for women and girl children, in South Asia, ranging from deprivation of nutrition in the mothers womb to over-feeding to feeding of substances that lead to food insecurity and ultimately can cause death.

**(3) Basic facility based food insecurity:** Even when demographic characteristics do not show much or any anti-female bias, there are other ways in which women in South Asia can have less than a square deal. In much of South Asia women and girl children have far less opportunity of schooling than men and boys do. It is true that amongst the South Asian countries, the primary school attendance of girls has improved<sup>19</sup> but SAARC countries on average are still well behind other groups, such as the ASEAN countries, with 96 girls per 100 boys enrolled in primary education in 2005. There are even two countries in the region with less than 80 girls for every 100 boys enrolled in primary school education in that year<sup>20</sup>. In some parts of South Asia it has been recently reported that girls have been banned from attending schools, under threat of dire consequences.

There are other deficiencies in basic facilities available to women and girl children, varying from access to preventive and curative health care, encouragement to cultivate one's natural talents to fair participation in rewarding social functions of the community. Hark these words: "A girl between her first and fifth birthday in India or Pakistan has a 30-50% higher chance of dying than a boy"<sup>21</sup>. This neglect may take the form of poor nutrition, lack of preventive care (specifically immunization)<sup>22</sup>, and delays in seeking health care for disease<sup>23</sup> 24. All these factors, taken one with the other, leads to higher capability poverty amongst women and girl children, which in turn contributes to limiting the productivity

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<sup>15</sup> Burns. (1994)

<sup>16</sup> Kollor (1990). pp. 3

<sup>17</sup> Walia (2005)

<sup>18</sup> Kumari (1995, pp.177-88)

<sup>19</sup> For example the ratio of girls per 100 boys at this level in India increased from 76 in 1991 to 93 by 2005, and in Nepal from 63 in 1991, one of the lowest ratios in the region, to 91 in 2005.

<sup>20</sup> UNESCAP (2007, pp. 63-64)

<sup>21</sup> Filmer *et al.* (1998)

<sup>22</sup> Pande (2003, pp. 395-418)

<sup>23</sup> Pande and Yazbeck (2003, pp. 2075-88)

<sup>24</sup> Fikree and Pasha (2004)

of women in producing food and opportunities for employment, in turn jeopardizing availability of food and their long term access to purchasing power and economic access to food, respectively. Indeed access to basic services like elementary education, primary health care including access to reproductive health facilities are key to attaining food security.

**(4) Special facilities inequality based food insecurity:** – Even where women may have access to basic facilities such as primary health care and elementary education, lack of opportunities for higher education, vocational and professional training for women is proverbial in South Asia, vis-à-vis those that are available for young men. Because, inter alia, “*the culture does not see this as ‘feminine’*”<sup>25</sup>. 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, post harvest processing and marketing. Such inequality prevents women from growing more food and/or achieving improved physical and economic access to food. In both cases food security of women and girl children is put at risk either by reducing food availability or truncating economic access to food.

The number of women in Engineering and Medical Schools are less than 15 per cent in most of the South Asian Countries. Even in developed countries, women account for only 14 per cent of those studying engineering at university and that abysmal percentage shrinks further when it comes to percentage of women pursuing a career as a professional engineer<sup>26</sup>. In India for example the percentage of women in the higher echelon of Civil Services is less than 10 per cent.

Many women in South Asia face barrier to the use of modern technology, which include lack of adaptation to local conditions and needs, discriminatory.

These imply that women are underrepresented in high paying jobs and to that extent their capacity to access food is lower than those of men and, taking a longer run, their capacity to withstand idiosyncratic shocks to themselves and their children is so much less.

**(5) Profession based food insecurity:** In terms of employment as well as promotion in work and occupation, women in South Asia often face greater handicap than men, notwithstanding the fact that it has three countries which have produced women Prime Ministers and Presidents. The percentage of women in higher level of “Power Status Structure” in South Asia varies between 2 and 8 percent except Pakistan where it is 20 per cent, mostly due to reservations<sup>27</sup>. More over there is the “glass ceiling” as it were where movement of women into more senior and higher managerial positions is curtailed by institutional barriers including norms and attitudes. For example, in the Armed Forces in this part of the World, women cannot be in combat positions. This is the case even in occupations dominated by women, where men are likely to occupy the more skilled “responsible and higher paid positions. (ILO, 2004).

Even where a country may be quite egalitarian in matters of demography or basic facilities, and even, to a great extent, in higher education, progress to elevated levels of employment and occupation seems to be much more problematic for women than for men. Women’s income-earning potential is, therefore, hindered, which in turn reduces their ability to access food.

And then there is the issue of wage differentials. Throughout South Asia, women’s wages range from half to two-thirds of the wages received by men. In Pakistan women receive, on an average, just about one-third of the wages paid to men, and in India where the wage differential is as high as 38 per

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<sup>25</sup> Amartya Sen (2001)

<sup>26</sup> Amy Mclellan (2005)

<sup>27</sup> Ghimire (2006)



cent<sup>28</sup>. The Maldives and Nepal have the least disparity in the wage structure, but everywhere in South Asia women receive less than or equal to than 60 per cent of the wages earned by men. In the case of India, gender-specific wage rates for both agricultural and nonagricultural work has been found for women agricultural workers to be at least 20 to 30 per cent lower than those earned by men for the same activity. In non-farm activities, women are paid less than half the wages earned by their male counterparts and have lower job security<sup>29</sup>. In 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<sup>30</sup>.

Women's low status in employment is not only a denial of basic rights, is very costly economic mistake<sup>31</sup>. The women to men employment ratio in South Asia are about 40 per cent, reiterating the low level of employment among women. The limited available data also shows that women are underrepresented in non-agricultural activities, which tend to have higher returns and labour productivity, with few exceptions. The difference is much more striking in the women to men employer ratio, which went down to 1.6 per cent in Pakistan, for 2005<sup>32</sup>. In the last analysis, what all this boils down to is that women as a class has lower economic access to food and are more vulnerable food insecurity.

Moreover, even when women are working in the Region they are predominantly employed in informal, labour-intensive, low value-added manufacturing and service sector jobs – vulnerable to domestic and global shifts in demand. “.....South Asia has not only relatively high share of vulnerable employment in total employment but also relatively large gender gap in vulnerable employments (exceeding 10 percentage points)”. (ILO, 2009 as quoted in UNDESA 2009). This is inimical to food security as “women in informal work have no access to social security or protection and have limited potential to organiser to ensure the enforcement of international labour standards and human rights. In consequence, such women are extremely vulnerable to both transitory food insecurity and food insecurity caused by idiosyncratic shocks.

**(6) Ownership based food insecurity:** The important role of women's in food production and processing in our part of the world “underscores the need to provide them with security of tenure of land they cultivate as well as access to and control over resources necessary to increase agricultural productivity and food security” (UDESA, 2009). Access to land rights, housing credit, technology, markets and extension services determines sustainable livelihood options for women.

However, regrettably, in many societies, especially in rural areas, in South Asia the ownership of property is be very unequal. “Asian rural women as small farmers and or as rural labourers represent the most vulnerable rural poor. This is mainly due to lack of access to assets and unequal control over monetary and non monetary resources at household level.....”<sup>33</sup>. Critical assets such as homes and land are very asymmetrically owned. For example, the laws of inheritance are dived against women and girl children. The absence of claims to property not only reduces the voice of women but also makes it harder for women to enter and flourish in commercial, economic and even some social activities.

A serious constraint for women farmers is their lack of access to security of tenure or ownership of land. ‘In largely agrarian economies, arable land is the most valued form of property and productive

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<sup>28</sup> Ramachandran (2006)

<sup>29</sup> Rustagi (2004)

<sup>30</sup> UNESCAP (2009)

<sup>31</sup> Figures for South Asia are not available but for Asia-Pacific the cost of continuing gender discrimination could reach \$80 billion per year.

<sup>32</sup> UNESCAP 2007) and UNESCAP, UNDP and ADB (2008, p.22)

<sup>33</sup> Polman (2002)

resource. It is a wealth creating and livelihood-sustaining asset.<sup>34</sup> Agriculture in South Asia falls can be classified as falling in the male farming system, dominated by patriarchy and extreme forms of gender discrimination<sup>35</sup>. This includes the right to ownership of land.

Traditionally, women have been denied equal inheritance rights to property both under the Hindu and the Islamic systems of law. In India, for example, under the both the Dayabhaga and Mitakshara Schools of Hindu Law, a woman could inherit ancestral property only in the absence of four generations of men in the male line of descent. Even then, her rights were limited to a lifetime of interest without the right to demise the property in any way by way of mortgage, sale or lease, except under exceptional circumstances. The Hindu Succession Act of 1956 attempted at rectifying some of these infirmities by way of investing equal shares to sons, daughters and widows in a man's own property and the same in his share of joint family property, but curiously enough kept agricultural land beyond the purview of the Act. It is only in 2005 by an amendment of the Hindu Succession Act that equal inheritance right has been granted to sons and daughters in all, forms of property including agricultural land<sup>36</sup>.

Similarly under Muslim Law in India, daughters were allowed only half the share of sons in the property bequeathed by their father. Like the Hindu Succession Act of 1956, the Muslim Personal Law *Shariat* (Application) Act of 1937, much earlier, had attempted at enhancing the property rights of Muslim women, but excluded all agricultural land, both tenanted and owned from the Act's ambit, barring in some of the states of South India. The gender discriminatory pattern of inheritance is also common in the Nepal, Bangladesh and Sri Lanka, where "personal laws govern inheritance, marriage and other social contracts and are in most cases inherently discriminatory. In Bangladesh, inheritance rights are governed by religion and under all religious laws, women have a lesser share than men"<sup>37</sup>. In Sri Lanka the situation is similar in all parallel systems of law such as the General Law, the *Kandyan* Law, the Muslim Law and the *Thesawalamai*<sup>38</sup>, although considerable reform of the General Law for gender equality has been initiated.

Even the much touted land reform and resettlement programmes in the late 1970s and early 1980s under 'Operation *Barga*', implemented by the Communist Government in West Bengal to secure the rights of tenants and fair returns to them, few women received land. For example, a village study showed that 98 per cent of the 107 holdings distributed, went to men and in 9 out of 10 female-headed households, it went to the sons. Married women did not even receive joint titles<sup>39</sup>.

Ownership of land has assumed critical dimension for women agriculture, because of rapid feminization of agriculture<sup>40</sup> and increasing migration of men from rural to urban areas in search of a living. An increasing number of *de facto* woman headed households struggle to eke out a living and ensure the food security of their families without access to credit, technology or extension services. Because it is not just land ownership but also all that goes with it, such as collateral to access institutional credit, training and ability to deal with extension facilities on an equal basis. [Such inequality has existed for long in other parts of South Asia as in other parts of the world, but there are also local variations<sup>41</sup>.] Equal property rights for women are relevant for developing production. They are even relevant for matters like raising wages, since the reservation wage is sticky. Moreover ownership

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<sup>34</sup> Agarwal (2002)

<sup>35</sup> Centre for Policy Dialogue (2000)

<sup>36</sup> Agarwal (2005)

<sup>37</sup> Ramachandran (2006)

<sup>38</sup> Chulani (2003)

<sup>39</sup> Ramachandran (2006)

<sup>40</sup> Kelkar (2007)

<sup>41</sup> For example, even though traditional property rights have favoured men in the bulk of India, in the State of Kerala, there has been, for a long time, matrilineal inheritance for an influential part of the community, namely the Nairs as also in the northeastern state of Meghalaya. In the Kingdom of Bhutan land is inherited in the female line.

inequality reduces women's ability and incentives to invest in agricultural land having a bearing on food availability and hence food security. Moreover, because of such factors, amongst others, women often become dependent on others for food especially as widows, when divorced or abandoned. These taken one with the other contribute to greater food insecurity of women.

**(7) Household based food insecurity:** There are often enough, basic inequalities in most parts of South Asia in gender relations within the family or the household, which can take many different forms often based on intra-familial distribution of power.

**Figure 3. Food discrimination**

		Seasonal food calendar – girl child/male child- one year old																							
Months Items	Chaitra		Baishar		Jyaistha		Ashar		Srabon		Bhadra		Aswin		Kartik		Aghran		Poush		Magh		Phalgun		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Rice	2	1	3	2	5	3	6	4	6	5	7	6	8	7	6	5	7	6	8	7	9	8	6	5	
Pulses	7	6	6	5	4	3	6	4	5	4	7	6	7	6	6	5	6	5	6	5	5	4	7	6	
Vegetables	3	2	4	3	3	2	4	4	4	3	6	5	7	6	5	3	4	3	7	6	6	5	5	4	
Fish	2	1	2	1	2	1	3	2	3	2	4	3	5	4	4	3	4	3	5	4	6	5	4	3	
Egg	6	4	4	3	3	2	3	2	4	3	5	4	6	5	4	3	7	5	8	7	4	3	10	9	
Milk	9	7	4	3	5	3	4	3	4	3	5	4	6	5	6	5	6	3	8	7	6	5	7	6	
Banana	7	3	6	4	4	3	3	2	4	3	5	4	7	6	6	5	4	4	6	5	5	4	8	7	
Orange	4	3	4	2	3	2	2	1	3	2	2	1	4	3	4	3	4	4	5	4					
Mango							3	2																	
Jackfruit							4	3																	
Pineapple												2	1	1		3	2	4	3	5	4				
Apple														2	1	4	3	4	3			5	4		
Papaya												4	3										6	5	
Biscuit	3	1	2	1	2	1	3	2	3	2	2	1	5	4	5	4	5	4	6	5	4	3	7	6	

Note: Same as in chart 28; Village analysis – Same as in chart 28.

**Box 4. The Hierarchy of the chicken**

The father eats the breast. He only likes white meat.

The kids eat the drumsticks, the thighs and the wings.

The mother eats the neck, the back, the liver, the gizzard, the feet and the heart

Source: Segal and Sklar (1987).

Even where no overt signs of anti-female bias in, say, survival or son-preference or education, or even in promotion to higher positions in the job market exist, the family arrangements can be quite unequal in terms of sharing food and the burden of housework and child care, apart from limiting women's opportunities for earning income thereby making inroads into women's economic access to food. Such arrangements may also include girls being fed less food and food of lower nutritional value than boys (See Figure 3<sup>42</sup>). Intra-familial distribution of resources including food within households, such as women being expected to eat the least, left-overs and after all others in the family have eaten, makes women vulnerable to food insecurity (See Box 4). Thus "Gender, in particular, is noted to be an important signifier of differences in interests and preferences, incomes are not necessarily pooled and self-interest resides as much within the home as in the market place, with bargaining power affecting the allocation of who gets what and who does what"<sup>43</sup>.

<sup>42</sup> Mukherjee, Neela (2003 Reprint)

<sup>43</sup> Agarwal (2002a)

Figure 4. Food discrimination

		Seasonal food calendar – male adult/female adult																							
Months		Chaitra		Baishar		Jyaistha		Ashar		Srabon		Bhadra		Aswin		Kartik		Aghran		Poush		Magh		Phalgun	
Items		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
	Rice		2	2	6	5	7	6	9	8	9	8	7	6	6	5	5	4	8	7	6	3	6	5	6
Chapatti		5	4	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	3	2	3	2
Vegetables		1	1	2	2	6	6	10	10	7	7	5	5	4	3	6	4	3	3	3	2	2	2	2	2
Pulses		10	10	5	5	4	4	2	2	3	2	6	6	7	7	7	6	7	6	9	7	8	8	9	9
Fish		1	1	5	2	4	3	2	3	5	2	3	3	8	3	8	2	5	2	4	2	1	2	2	2
Egg		3	2	4	2	3	2	3	2	4	1	4	2	8	3	10	4	9	9	10	9	8	7	7	6
Milk		11	10	5	5	4	4	3	3	3	2	3	3	4	3	2	2	2	2	2	2	2	2	8	8
Mango		-	-	-	-	4	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jackfruit		-	-	-	-	9	6	8	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Village Analysis – Rehana Parvin and Ferbusi Beguy  
Village Banstaol, District Tangail, Bangladesh

Note: The figures show the number of seeds used in scoring; M = Male, F = Female.

Intra-household power-status-structures directly impact on women's food security and indirectly on food security of others in the family, particularly children. Indirect evidence in terms of gender-specific malnutrition levels point to existing disparities. "In poor households, in particular, the incidence of severe malnutrition is greater among girls. In fact, gender has been found to be the most statistically significant determinant of malnutrition among young children"<sup>44</sup>. In Punjab, India a sharp difference in calorie intake among adult men and women has been found in some studies, with women consuming approximately 1000 fewer calories than men<sup>45</sup>. And it has also been found that in some cases though boys and girls were treated similarly in terms of total calorie intake, the nutritional value of the food were dived against the girl children: girls were given more carbohydrates in the form of cereals, while boys were given more milk and fats with their cereal.

Intra-household gender bias in favour of male children, both in terms of feeding and seeking healthcare has been noted in Pakistan<sup>46</sup>. Women in Bangladesh are seemingly a residual category in intra-household food distribution, eating after men and the children and eat what is left after all others have eaten<sup>47</sup>. A similar pattern prevails in most South Asian countries. The structure of the family also plays a role in women's food security. In nuclear families where the woman herself is responsible for food distribution, she gives preference to her husband and children at the cost of her own needs<sup>48</sup>. A study in India, for example, documented the practice of 'maternal buffering' – as mothers deliberately eat less to allow men, particularly younger men, and children in their households to get enough to eat<sup>49</sup>. While pre-school children are best fed within the family with meat, fish and dairy products in their diets, boys are favoured over girls. These gender disparities among pre-school children tend to disappear in the middle- and higher-income groups, but the neglect of the adult female persists across all groups<sup>50</sup>. Among adults, the female is the most neglected, with adult and even elderly males receiving more nutritious food (See figure 4<sup>51</sup>).

<sup>44</sup> Ramachandran (2006)

<sup>45</sup> Development Gateway (2004) and Mukhopadhyay (2007)

<sup>46</sup> Nazli and Hamid (eds.) (Undated)

<sup>47</sup> Rahman (2002)

<sup>48</sup> Mondal (2003)

<sup>49</sup> UNESCAP (2009)

<sup>50</sup> Rahman (2002)

<sup>51</sup> Mukherjee (2003)

Thus household based food insecurity confronting women and girl children take many forms from lower quantity of food in terms of reduced intake of food, to less nutritious food in terms of poorer quality of food to reduction in women's purchasing power leading to reduced access. Some of these deprivations are based on misconceived social constructs.

**(8) Seasonality based food insecurity:** The multi-tasking of women as food growers, gatherers, hunters, processors and custodian of food is well documented. Yet women, even when they may not suffer from chronic or transitory food security, suffer from seasonal food insecurity<sup>52</sup>. There are certain seasons or months when food security is routinely jeopardised for women. It has been found in studies in India that generally during the summer months of May and June and during the cultivation season, June to September, women are particularly vulnerable to food insecurity<sup>53</sup>. And these are the months when their calorific needs are at the highest.

Men too are affected by seasonality dimension of food security but with feminization of agriculture<sup>54</sup>, it affects women disproportionately more. During the lean months men migrate to cities and towns as mentioned earlier; usually the out migration from the villages start after the harvesting season. The emigrants return just before the following agricultural season. For example in large parts of Bangladesh<sup>55</sup> and in Bihar, Jharkhand and West Bengal, in India, men migrate to urban areas around January-February and return with the onset of the monsoons in May-June. As a result of this cyclical migration of men, women who stay back at home to hold on to agricultural operations howsoever small, and conservation of bio-resources, face lower availability of food as food from own farms last for 6-9 months at best, fewer employment opportunities, lower wages if employment is available at all and increased vulnerability to diseases that inhibit food utilization. Thus seasonality impinges on women's food security from different perspectives.

#### **IV. The future**

Thus over the long-term, there are serious impending challenges to the future capacity of the Region to ensure food security for all women and children<sup>56</sup>. Granted that, policy actions have to be on led four broad fronts, *expansion in systemic food availability* for women and children (meeting the challenges of higher food production, water scarcity, energy security, climate change, industrial agriculture and trade, promoting community based responses); *improving economic, physical and social access to food for women and children* (transport and social protection) and *improving utilization of food* by women and children (vigorous expansion of promotive and preventive health care as also access to reproductive health care and potable water; and improvements in personal and social hygiene).

#### **V. The framework for food security for women and children**

Given the above scenario, a successful strategy to deal with the present and future food security needs of women and children in the South Asia Region would aim at:

- Ensuring sustainable supply of appropriate food in adequate quantity for all women and children;
- Protecting women and children against shocks, both covariate and idiosyncratic varieties.
- Meeting the challenges of water scarcity, energy security and climate change;

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<sup>52</sup> Smith and Wiesmann (2007) and Neela Mukherjee and Amitava Mukherjee (1994)

<sup>53</sup> Mukherjee and Mukherjee (2001) and Mukherjee (2004)

<sup>54</sup> Kelkar (2007) and Vepa (2007)

<sup>55</sup> Afsar (2000)

<sup>56</sup> Not the least because of changes in demographics, rapid depletion of water resources, impact of climate change and erratic weather events, and anticipated proliferation of natural and human induced disasters.

- Meeting the challenge of making trade and transportation work for food security of women and children;
- Providing women and children with economic access to food;
- Ensuring that women and children have physical and social access to food;
- Ensuring that women and children utilize and absorb the food that is consumed.

In order to achieve these goals, countries in South Asia, irrespective of whether they are self sufficient or self reliant in food or suffer net food deficit will need to establish a set of policies that would ensure, amongst other things:

- i. Increase and diversification of production especially in agriculture to expand employment opportunities for women and availability of food on a sustainable basis for women and children;
- ii. Enhancement of general economic growth especially in agriculture, expansion of employment for women and guaranteeing decent rewards for work for them to ensure increased availability of purchasing power of women on a sustainable basis;
- iii. Protecting large sections of the population comprising women and children from *both* idiosyncratic and covariate shocks that impinge on food security; and providing special social protection to vulnerable sub-populations *within* women and children (including small women farmers, women and children with disabilities, women and children living with HIV/AIDS, elderly women, and infirm women and children) (to guarantee economic, physical and social access to, and utilization of food for women and children, based on justice and equity);
- iv. Reduction in gender based inequalities that lead to seven kinds of food insecurities faced by women;
- v. Enhancement of literacy and health care for women and children which includes supply of potable water and enhanced systemic social and personal hygiene;
- vi. Strengthening gender sensitive governance and institutions, including gender sensitive news media and civil society organizations.

## VI. The call for a second green revolution

Having said all of that, we shall present a partial set of options addressing the five elements of the framework. Enhancing of literacy and health care for women and children require a full discussion between them, and are reserved as issues for a future discussion.

### Options at the country level:

1. *Start a Gendered Green Revolution*: While the first Green Revolution of the last century achieved significant yield increases in the South Asian Region, through promotion of high external input agriculture, HEIA (of irrigated water, chemical fertilizer, chemical pesticide and insecticides and energy use), with male farmers at the centre, it also brought with it, several attendant problems, including additional workload for women. Now, a *Gendered Green Revolution* is needed, one that will increase yields even further, but one that moves agriculture from high external input-intensive agriculture to "*High Tacit-and-Explicit Knowledge-Intensive Agriculture*". Granted that a large body of tacit knowledge in food production rests with women, they will occupy the center stage. The proposed Green Revolution must integrate traditional knowledge and technology with

advances in modern-day science and agricultural engineering<sup>57</sup> including plant genetics, plant pathology and information technology and encompassing ecologically integrated approaches, like intergraded pest and soil fertility management, minimum tillage and drip irrigation. Given that large chunks of these inputs relating to ecologically integrated approaches will be internal to the farming household system itself where women are key players, it will be an empowering process for women. A *High Tacit-and-Explicit Knowledge-Intensive Agriculture* thus commends itself both on grounds of resilience and equity as it will attempt to return “power to produce” to the women in farming households rather than investing the whole of it to corporate board rooms, and on grounds of environmental sustainability.

2. **Get the fundamentals right:** To make the *Gendered Green Revolution* happen, there will be a need to focus on setting the *factor inputs* right for women. Access to key factor inputs for women, namely, access to assets (land, tools, machinery, water<sup>58</sup> and “energy”) without demur or recourse; efficient credit for women (fair interest rates and timely availability); gender sensitive knowledge system (technology serves women’s need best and a robust agricultural extension service to transfer technology of food production from the laboratory to women<sup>59</sup> in the farms, especially the small and marginal farms); women’s access to information communication technology as applicable to farming (such as precision agriculture); and risk management for women in farming households, especially the small and marginal ones, need to be made available on a sustainable basis. An economic Sherlock Holmes may well say: “*Elementary, my dear Watson*”, but Alas the elementary things often matter and are often overlooked for more glamorous but may be less efficient solutions.
3. **Institute Universal Social Protection:** Many countries in the Asia Pacific region provide protection to vulnerable groups through subsidies, outright grants (like old age pension or widow pensions), price support or price control. These instruments of social protection are often gender insensitive, and/or inefficient because they lack in **range, reach and depth** or some combination of these. For example the widow pension scheme in India provides only Rs. 250 per month, if they get it at all and the scheme covers a very small percentage of widows<sup>60</sup> and riddled with informal taxation (see Box 5). And even these inefficient instruments come with a high cost: subsidies, outright grants (like pensions) and price support that can create havoc with government finances, while price control, though beneficial to food consumers, concomitantly, carries the unintended effect of reducing farmers’ incentive to produce more food.

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<sup>57</sup> Genetically modified crops may have a role in this regard but the risks are not all known, and so harnessing its power in agriculture, should be preceded by a robust testing, regulatory and safety regime. Germany recently became the sixth EU country to ban a type of genetically modified maize, the only GM Crop permitted until now in the country. See “Agriculture in EU”, <http://www.eubusiness.com/agri> accessed on 15th April 2009.

<sup>58</sup> Including time tested irrigation structures like wells, canals, percolation tanks and ground water extraction, to which traditionally women have access as well as in water harvesting and ground-water recharges systems that are gender sensitive.

<sup>59</sup> Women’s needs tend to be ignored, even in agricultural research and technological innovations. Worldwide, only 5 per cent of extension services have been addressed to rural women. See FAO (1996).

<sup>60</sup> There are similar examples in other regions as well. For example, China basic health Insurance covers only 30 per cent of its 1.3 billion populations. The system is being revamped and the amount that each person covered will get as subsidy is about \$ 17 per year starting in 2010.

### Box 5. Crooks Wait on the Road to Widows' Pension

Vrinda Gopinath, Vrindavan, February 6

The bundle of papers wrapped in cloth and kept behind a curtain in Swami Vivekananda School is forever mocking at the bitter sacrifices made by the widows and abandoned women in Vrindavan.

The 50 odd old-age pension forms with photographs, thumb impressions and official signatures have been lying for over a year, forgotten and dusty. For the women of Vrindavan, however, the papers carry a fervent hope that one day they will receive their meager pension of Rs. 1,500 a year, which they have been entitled to since a decade and more. Kamala Ghosh, the school's principal (sic) and mother to the *mais*, can only offer solace as she conforms the women with some optimistic cheer. Says Ghosh, as she unwraps and displays the fraying papers, "These forms were filled after we organized a camp for the women to come and take what is rightfully theirs ... they were not even aware that they were entitled to a pension. I got my students to help in filling forms and completing formalities but the officials have not bothered to forward them to the district headquarters." Ghosh adds that work gets done if the district magistrate (sic) is sympathetic as some of the previous efforts have been quite fruitful.

The procedure is quite straightforward if it is carried out willfully – a Health Officer from the State Social Welfare Ministry certifies the age, the SJM and DM attests their signature, it goes back to headquarters where a cheque is drawn and deposited in the bank. What could be an easy task – as there are about 2000 aged widows in this temple town – a whole corrupt network has thrown a ring around them, picking on their drying bones. There are several cases of cheques being issued in names of landlord, account books which are wrongly tabulated, pension forms which are suspiciously lost and, last year, 250 cheques were returned because the beneficiaries could not be traced for lack of incomplete forms.

Bhanu Ghosh, a 70-year-old widow, still clutches on to a cheque which has come in the name of Premlal, her landlord, despite the fact that her husband's name is Gurudas Ghosh. Says the frail, old lady, "We have to bribe the Patwari<sup>61</sup> to get our money from the bank, even the postman to receive the money order from home."

Source: The Indian Express, New Delhi, Monday, 7 February 2000.

A **Universal Social Protection** represents a better alternative. Given the diversity of South Asia, the challenge is to devise innovative ways of providing Universal Social Protection to a range of people, with better targeting, appropriate depth and adequate reach. It could include the following:

- Undertaking *ex ante* management of covariate<sup>62</sup> shocks to food security by boosting coping strategies of women at risk of suffering covariate shocks through installation of insurance and insurance-like programmes for women with flexible targeting, flexible financing, and flexible implementation arrangements, before the onset of natural disasters.
- Provisioning for *de jure* and *de facto* insurance for idiosyncratic shocks<sup>63</sup> including through
  - more effective, ubiquitous and continuing insurance programmes, whether through *financial innovations* such as micro insurance for women or *index insurance schemes* that are especially designed for women farmers and *community-based health insurance programme for women and girl child*;
  - *de facto* insurance, via, for example, a robust system of protecting common property resources with special usufructory rights for women guaranteed, 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 women from idiosyncratic shocks like sudden loss of valuable and productive assets, unexpected loss of means of livelihood through desertion, sudden illness or other adverse effects.
- Eliminating gender based seven food inequalities:
  - Through a multi-sectoral programme of, inter alia, social security, affirmative actions, changing laws relating to inheritance and ownership of productive resources and making right to food, education, health care and information for women, justiciable rights.
  - 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.

<sup>61</sup> A local level Revenue Official.

<sup>62</sup> Covariate Shocks are those shocks, which affects everyone in a community or area.

<sup>63</sup> Idiosyncratic shocks are those shocks, which affect a household or an individual.



- By creating an enabling environment, to use Amartya Sen's phraseology, for "cooperative conflict" between genders and devise ways and means for amicable resolutions.
  - Taking affirmative action including reservation of seats for women in all legislatures and Parliaments as a fair outcome and realization of the benefits of law.
  - Making guaranteed employment for 100 days a legal right, for especially marginalized sub-groups among women population (like women having dependents with disabilities, elderly, widows, women small farmers, women migrants, women categorized as internally displaced persons and women-headed-households) and women facing discrimination on the basis of race, religion, caste, ethnicity, 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* insurance for such groups.
4. *Get gender sensitive institutions in place:* Gender sensitive institutions that help the women farmers be put in place, of which extension education accessible to women of farming households, institutions for post-harvest facilities, purveyors of credit for women farmers, markets where women farmers can operate, adequate infrastructure that are gender sensitive, communication networks, connectivity including mobile phones, capacity of women in farming households to meet international standards (especially on food safety) are especially important<sup>64</sup>. A key element in this picture is the system that can help women small and marginal farmers reap the benefits of economies of scale in marketing outputs and help them to meet standards of up-market stores. In the past, this role was often played very inefficiently by government-run parastatals, but even they have been since dismantled under onslaught of the global programme of liberalization, privatization and deregulation. A system of incentives have to be instituted for private companies, Community Based Women's Organizations (such as Self Help Groups in India), gender sensitive grass-roots Non-Governmental Organizations and women-farmers' organizations that have the capability to help small and marginal women farmers' to reap the benefits of economies of scale in marketing outputs and help them to meet standards of up-market stores.

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<sup>64</sup> One reason why the benefits of higher prices did not accrued to farmers in many countries of South Asia, in 2007 and 2008, was paucity of institutions, which allow farmers to take advantage of the higher prices of food in the international market. Where institutions existed, farmers have reaped benefit; in Viet Nam where small farmers have benefited from high food prices by accessing export markets.

**Table 1. Children underweight in South Asia**

Country	Proportion of children underweight (%)		Number of children underweight (thousands)			
	(oldest observation since 1990)	(most recent observation)	(oldest observation since 1990)	(most recent observation)		
China <sup>65</sup>	19.1	k (90)	6.9	k (05)	22,703	5,885
Myanmar	32.4	h (90)	31.8	k (03)	1,625	1,327
Afghanistan	48.0	o (97)	39.3	f, r (04)	1,691	1,830
Bangladesh	67.4	r (92)	47.5	k (04)	11,569	8,985
Bhutan			18.7	r (99)		13
India	53.4	c, i (93)	45.9	g (05)	67,775	58,244
Maldives	38.9	l (94)	30.4	k (01)	15	10
Nepal	48.7	p (95)	38.6	k (06)	1,695	1,394
Pakistan	40.4	b, k (91)	37.8	e, k (02)	8,337	7,720
Sri Lanka	37.7	n (93)	29.4	n (00)	662	475

Sources: As quoted in UNESCAP (2009): Proportion of children underweight from United Nations, 2008. "Millennium Development Goals Indicators, The official United Nations site for the MDG Indicators", <<http://mdgs.un.org/unsd/mdg/Data.aspx>>. Number of children age 0-4 years from United Nations, 2007. "World Population Prospects: The 2006 Revision. Population Database", <<http://esa.un.org/unpp/index.asp?panel=2>>.

Notes: b. Data refer to 1990-1991. c. Data refer to 1992-1993. e. Data refer to 2001-2002. f. Data refer to 2003-2004. g. Age group is 0-35 months. i. Age group is 0-47 months. k. Age group is 0-59 months. l. Age group is 0-60 months. n. Age group is 3-59 months. p. Age group is 6-35 months. r. Age group is 6-59 months.

<sup>65</sup> Projected here for benchmarking purposes only.

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