



# Women Empowerment and Its Impact on Livelihood and Food Security of Households: A Review

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## Authors' contributions

This work was carried out in collaboration between both authors. Author JD designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author AS managed the analyses of the study. Both authors read and approved the final manuscript.

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## ABSTRACT

Rural women in India and several countries of South-East Asia play crucial and significant role in livestock rearing, agriculture and other allied activities, but their contribution has not been incentivized given the due place they deserve. They always remain invisible workers. Increasing demand for milk and animal products in recent years intensifies livestock rearing as profitable enterprise for women. Many development programmes that aim at alleviating poverty and improving investments in human capital consider women's empowerment a crucial pathway to achieve impact and often target women as their main beneficiaries. Women across the world have often been seen as the primary caretakers in a household. Hence, the intra-household dynamics that determine allocation of resources and their impact on well-being are in a subject of analysis. It has been seen that households do not necessarily act in an unitary manner. While allocating resources, women and men have their preferences for allocating food and nonfood resources and may therefore be involved in distribution of these resources differently, based on their bargaining power within the household. This article reviews the linkage of women empowerment and household food security and ways to measure it for effectively targeting the policies for strengthening the household food security.

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## 1. INTRODUCTION

The gender division of labor varies from one society and culture to another, and within each culture. However, except in few most developed countries, women's efforts are not yet realized by society. But, it is impossible to think of development while neglecting the women work force, as women represent the major force for rural changes, largely as an un-tapped resource that could boost rural development and lead to higher growth rates and increased food production. Rural women particularly in the developing countries face hardship by undertaking triple roles, that is, productive role, reproductive role and community participation role in their day to day life. They also live in an environment where less or no social services, lack of infrastructural facilities and with no exposure to information and technologies. As more and more women are entering the work force, their role as income earners and breadwinners is a matter of importance while it comes to their empowerment in different aspects. A key feature for sustainable and improved rural livelihoods clearly, is to develop capacity of the principal actors of household wellbeing, who are women. Most developmental organisations recognize the linkages between poverty and gender issues, and places great importance on women empowerment as a means to reduce poverty and food insecurity (IFAD, 2011) [1]. Women play important roles to help their family in particular and their community in general by ensuring food and nutritional security and thereby influencing the livelihoods of the household and community as a whole. The current article reviews the issue of women empowerment and its status in terms of its effect on the food security, nutritional security and upliftment of the livelihoods of the rural households. In the 1975, the United Nations approved the celebration of International Women's Year. As part of the celebrations, the First World Conference on Women was held in 1975 in Mexico City. At that meeting, it was proposed that the following decade be proclaimed as the UN Decade for Women and follow-up meetings to assess progress be held in 1980 and 1985. The General Assembly adopted a World Plan of Action with recommended targets for governments to integrate women's equality, development and participation in peace initiatives. The mid-point meeting was held in Copenhagen, adding sections to the revised

Programme of Action devoted to ensuring women equal access to education, employment opportunities, and adequate health care. Both of the previous conferences had struggled with the divide caused by Cold War politics and the needs of the developing world. These conferences mostly focused on women's issues in the face of Soviet accusations that the United States imperialistic and war mongering tactics were undermining the goals of the Decade for Women and the US concerns that the Eastern Bloc attempts at politicization which would derail any real improvement in the unique problems faced by women. In 1985, at the International Women's Conference at Nairobi, women empowerment was initially introduced as a concept and concluded in the conference that empowerment is a rearrangement of power and control of resources in support of woman through positive intervention. The earlier workers in this field referred to the empowerment of women as a function of economic development, dispensation of democracy, and the removal of social injustices that increase gender inequalities [2,3]. They believed that there is positive relationship between economic development and an equitable distribution of educational, occupational and agricultural resources [4].

## 2. WOMEN EMPOWERMENT: THE NEED

Women are flag bearers in ensuring household wellbeing in the rural areas of most developing countries of South-east Asia including India. Women in rural areas are key players in ensuring household livelihood outcomes [5]. They often manage households and pursue multiple livelihood strategies. They play key roles as food producers and agricultural entrepreneurs who dedicate their own time, income and decision-making to maintain food and nutritional security of their households and communities; and ensuring the stability of food supplies in times of economic hardship [6]. Rural women are also involved in other non-farm income generating activities, such as fetching water and firewood, and taking care of basic education and health issues of family members [7]. Thus, rural women are key agents for achieving the transformational economic, environmental and social changes required for sustainable development [8]. They need more access and control of resources, which together constitute the empowerment capabilities leading to improvement in their livelihoods. Thus, women empowerment is

considered important to provide them with the means to meet their needs and desired livelihood outcomes. In order to move in that line, the year 2001 was observed as 'Women Empowerment Year' by the Government of India. It has been observed that the growth of any nation is extensively influenced and determined by the status and development of woman." PM Jawaharlal Nehru once said, "Women should be uplifted for the betterment of the nation, if a woman is uplifted, society and nation is uplifted." The mid- 1980s, observed the emergence and spread of women's empowerment. Within the framework of a democratic polity, our laws, development policies, plans and programmes have aimed at women's advancement in different spheres. The Fifth Five Year Plan onwards has a marked shift in the approach to women's issues from welfare to development. In recent years, the empowerment of women has been recognized as the central issue in determining the status of women. The National Commission for Women was set up by an Act of Parliament in 1990 to safeguard the rights and legal entitlements of women. The 73<sup>rd</sup> and 74<sup>th</sup> Amendments (1993) to the Constitution of India have provided for reservation of seats in the local bodies of Panchayats and Municipalities for women, laying a strong foundation for their participation in decision making at the local levels. Further, the National Policy on the empowerment of women was drafted in the year 2001 to protect the interests of women and to end the discrimination they face in various aspects of their life and the society.

### **3. WOMEN EMPOWERMENT: MEANING AND SCOPE**

A review into the literature reflects considerable diversity in the emphases, agendas, and terminologies used to define women empowerment. The terminologies that are most often used refer to choice, power, options, control, and agency [9]. Even though, there is no single definition of women empowerment in the literature, [10,11]. it is described as a process or outcome, an end state or a means to an end, a matter of gaining power and resources in order to achieve self-reliance. Many studies have defined empowerment as the process of getting over the factors which cause lack of self confidence [12,13]. Earlier workers like Keller and Mbweve [14] and Rowland (1997) [15] said that women empowerment as a process wherein women become able to increase their own self reliance and links it with more space for control and to

encompass change at the personal and collective level. Also, it is agreed upon largely that women empowerment is a bottoms-up approach rather than a top-down strategy [13,16]. The organizations, such as, Oxfam, view women empowerment as an outcome and a process. Others such as, the US Agency for International Development (USAID) and United Nations Development Programme (UNDP) [17] take an instrumentalist view on the empowerment of women and focus more on the importance of process and the assumption that participation will lead to empowerment [18].

### **4. FACTORS DETERMINING EMPOWERMENT OF WOMEN AND ITS OUTCOMES**

A further probe has found that certain dimensions of women's empowerment and household socio-economic characteristics (husband's income, household size, dependency ratio, etc.) are critical for women to attain the desirable livelihood outcomes. Women with increased levels of financial and human capital forms of empowerment were more likely to be self-reliant in choices they make towards improvement in livelihoods of their families. On the other hand, women with higher of socio-cultural restrictions to agriculture are less likely to have food secure households. The process of empowerment is more relevant for women since it is made more complicated by the fact that they play a major role in household and intra-familial relationships as well as in the agricultural sector [19]. In addition to it being an end goal in itself, women empowerment is also considered as a means to achieve other important livelihood outcomes such as more income, increased well-being (non-material goods, like self-esteem, health status, access to services, sense of inclusion), reduced vulnerability, improved food security and a more sustainable use of natural resources (appropriate property rights), improvements in child nutritional status, and self-reliance [9]. Mayoux [20] argues that empowering women can also lead to other broader development outcomes, such as greater participation in local government processes, rural development and overall poverty reduction. Empowerment gives individuals or groups capabilities to make purposive choices and to transform those choices into desired actions and outcomes (World Bank, 2001) [21]. Therefore, the ultimate goal of empowering the women is for them to achieve their desired livelihood outcomes. Agriculture and allied sectors form a major component for enhancing the livelihood

outcomes of people in rural areas. Agriculture and its related sectors are not only a rural Indian way of life, but also one of the major occupation of most people in rural areas. In many developing nations, agriculture still holds the key to improving rural people’s livelihoods [22]. It can therefore be utilized for the upliftment of rural households in general and of women in particular. The process of empowerment in agriculture is, therefore, more relevant for rural women since they have previously been denied access and control of the assets and capabilities crucial for making strategic choices in agriculture [19]. The measurement of different aspects of Women Empowerment with respect to agriculture and allied sectors is inevitable for framing of policies which would be helpful for directing the benefits towards development of rural women. Several studies have attempted to measure women’s empowerment in agriculture. One significant effort towards this has been the development of Women’s Empowerment in Agriculture Index (WEAI) by the US government’s Feed the Future Initiative in 2012. The WEAI focuses on the “agency” aspect, which is far less studied than resources or achievements [23]. The WEAI also departs from previous measures of women’s empowerment like Dairy Women Empowerment Index(DWEI) and Cumulative Women Empowerment Index(CWEI) in aspects that it captures control over resources or agency within the agricultural sector, something which existing indices have not done. It is an aggregate index that shows the degree to which women are empowered in their households and communities and the degree of inequality between women and men in the household [24]. In 2015, IFPRI and “Feed the Future” released an abbreviated Italics version of the WEAI that has a shorter interview time and removes four sub-areas of the original WEAI that

were either too subjective or too confusing for enumerators to collect.

### 5. MEASUREMENT OF WOMEN EMPOWERMENT: WOMEN EMPOWERMENT IN AGRICULTURE INDEX (WEAI)

Measurement and quantification of empowerment has been done by various scholars in difficult ways because processes of empowerment cannot be easily observed and proxy indicators are often used for measurement. The challenge that comes with using proxy measures is that they do not provide much information on the “decision making dynamics. These measures are therefore better defined as correlates or indirect measures of empowerment rather than determinants [25].

The Women’s Empowerment in Agriculture Index (WEAI) is an innovative new tool composed of two sub-indexes: one measures the five domains of empowerment for women, and the other measures gender parity in empowerment within the household (International Food Policy Research Institute,2012).

$$WEAI = 0.9(5DE) + 0.1(GPI)$$

Five domains of empowerment (5DE): This sub-index assesses whether women are empowered across the five domains examined in the WEAI.

Gender Parity Index (GPI): This sub-index reflects the percentage of women who are as empowered as the men in their households. The GPI sub-index shows the gap that needs to be closed for women to reach the same level of empowerment as men. The GPI allows us to compare the agricultural empowerment of men and women living in the same household.

**Table 1. The five domains of empowerment in the WEAI**

Domain	Indicators	Weights
Production	Input in productive decisions	1/10
	Autonomy in production	1/10
Resources	Ownership of assets	1/15
	Purchase and sale of assets	1/15
	Access to and decision on credit	1/15
Income	Control over use of income	1/5
Leadership	Speaking in public	1/10
	Group member	1/10
Time	Work load	1/10
	Leisure	1/10

## 6. DIMENSIONS AND SUB-DIMENSIONS OF WOMEN EMPOWERMENT

The report of World Bank on “Engendering Development” (2001) speaks about the rights, resources, and voice as the three vital gears of gender equality. Women empowerment is a multidimensional and complex process that captures a multitude of constructs. The dimensions of women empowerment are dynamic, interlinked and mutually reinforcing; So women empowered in one dimension, may not necessarily be empowered in another [10,25]. Hence, the identification of the dimensions in which women are empowered or disempowered allows agencies in developing countries, to be more effective in designing interventions for their empowerment. A list of the most commonly used dimensions of women’s empowerment has been synthesised from the multidimensional approach suggested by Malhotra et al. [25] and Kabeer [10] and the resource-agency-outcome approach [10]. The multidimensional framework suggests that rural women’s empowerment occurs along the following dimensions and their sub-dimensions:

- Economic (physical capital, human capital, natural capital, and financial capital empowerment)
- Socio-cultural (social capital, familial/interpersonal, organizational, cultural and informational empowerment)
- Agricultural (access to agricultural resources, crop production skills, animal husbandry skills, water-use security levels)
- Civic (legal, political, and psychological)

## 7. WOMEN EMPOWERMENT VIS-À-VIS SELF-RELIANCE

It is the social and economic ability of an individual, household or community to meet basic needs (including protection, food, water, shelter, personal safety, health and education) using their own resources in a sustainable manner and with dignity [26]. Self-reliance is thus, development on the basis of a country’s, households’ or individual’s own resources, based on the potential of the cultural values and traditions. According to Haque et al. (2012) [27] and Keller and Mbwewe [14] the core outcome of women’s empowerment lies in their ability to control their destiny and be self-reliant. Hence, self-reliance is an integral outcome of women empowerment, since development should foster self-reliance

[28]. Therefore, women empowerment (i.e., women’s access and control over resources and their agency) is a pre-requisite to achieve self-reliance. Women depending more on farm and off-farm livelihoods lies within the UNHCR’s [26] conceptualized definition of self-reliance since they had a higher capacity to meet their basic needs using own resources in a sustainable and dignified manner. The ability of the women to be more self reliant make them independent and aware of the needs of the family. Self-reliance adds to economic independence of the women thereby ensuring food and nutrition security of the household as a whole. It also aids in increasing the purchasing power of the family.

## 8. EMPOWERMENT OF RURAL WOMEN: STRENGTHENING THE HOUSEHOLD FOOD SECURITY

In most rural areas where subsistence agriculture is a predominant source of livelihood, women play multiple roles throughout the processes of the production, handling and preparation of food [29]. As a result, women’s empowerment has become a frequently cited goal of rural development aimed at reducing household vulnerability to poverty and food insecurity. It is considered an essential way to provide the most vulnerable households with the means to their livelihood strategies and food security. Nevertheless, empowerment of rural women aims to ensure self-reliance and reduce vulnerability to shocks in the future [30]. In recent years, there has been increasing awareness that the analysis of food insecurity should not just consider its current incidence, but should also identify the individuals, households or the communities who are more at risk of suffering in the future [31]. Since household vulnerability to food insecurity is influenced by both farm and off-farm incomes, it was hypothesised that vulnerability to food insecurity is influenced by both dimensions of women’s economic and agricultural empowerment.

## 9. DETERMINANTS OF HOUSEHOLD’S VULNERABILITY TO FOOD INSECURITY

A household’s socio-economic characteristics that influence food security include the gender of the household head, family size, dependency ratio and age of the head of household. Since age captures the experience accumulated in farming, it may, therefore, be associated with

better opportunities to acquire food [32]. Men have a better opportunity to access assets and, therefore, married women's households are expected to be less susceptible to food insecurity. It is also hypothesised that households with a higher dependency ratio have a greater probability of being food insecure. The probability of a household becoming food insecure in the future is determined by the present conditions, risks potentially occurring within a defined period and the capacity to manage the risks. At the household level, the major types of risk include health (illness, disability, injuries), life cycle-related (old age, death, dowry), social (inequitable intra-household food distribution), economic risks (unemployment, harvest failure, price changes) and threats related to the natural environment. These risks cause food insecurity by lowering food production, reducing income, reducing asset holding, increasing indebtedness and reducing food consumption.

#### **10. DISEMPOWERMENT OF WOMEN: A THREAT TO HOUSEHOLD FOOD AND NUTRITIONAL SECURITY**

Women who are not empowered are more likely to have lower mental health, less control over household resources, lower self-esteem, and less access to information about health services. Many studies have shown an association between experience or acceptance of physical domestic violence and child under nutrition. The research linking women's empowerment and nutrition is further supported by the evidence that men and women within a household often, have, different preferences for allocation of resources and distribute these differently based on their bargaining power within the household. The gender of the person who has access to and control over resources can hence influence the extent to which resources are allocated to benefit health and nutrition outcomes.

#### **11. WOMEN EMPOWERMENT AND CHILD NUTRITION: MAKING THE WEAKEST LINK STRONGER**

Women's empowerment is considered crucial for improving nutrition outcomes. Several studies (using direct and indirect measures of female empowerment) have demonstrated the important associations between women's empowerment dimensions and their own nutrition as well as that of their children. In Bangladesh, greater empowerment of women (measured by attitudes

toward abuse, decision making power, and mobility) and maternal endowments such as education and height were associated with greater dietary diversity scores and reduced child stunting. A study in Andhra Pradesh, India, found that measures of maternal autonomy (such as financial autonomy, participation in decision making within the household, acceptance of domestic violence, and freedom of movement) were associated with positive infant feeding and growth outcomes [33]. Another study in India found that maternal autonomy (measured based on variables that indicate a woman's freedom and ability to think, speak, decide, and act independently) positively associated with child nutritional status, albeit only for children under three years of age [34]. In Ethiopia, a study that analyzed correlates of female empowerment found positive effects of female bargaining power on child nutrition and child education [35]. Impact evaluation of a project by CARE (Cooperative for Assistance and Relief Everywhere) [36] in Bangladesh using a rights-based livelihoods approach to address malnutrition found that its women's empowerment interventions had a "strong independent impact on stunting, and the sanitation, women's empowerment, and one poverty alleviation intervention were found to have synergistic impacts with direct nutrition interventions. After analyzing the empowerment V/S food & nutritional security, the core issue emerges, is the wellbeing and food & nutritional security at households likely. This is actually the most sought after development goal.

#### **12. HOUSEHOLD VULNERABILITY TO FOOD INSECURITY VIS-À-VIS WOMEN EMPOWERMENT**

The different methodologies are commonly used to assess vulnerability: vulnerability as uninsured exposure to risk (VER), vulnerability as low expected utility (VEU) and vulnerability as expected poverty (VEP) [37]. All three methods construct a measure of welfare loss attributed to shocks, but differ in that VER and VEU measure the ex-ante probability of a household's consumption or utility falling below a given minimum level in the future due to current or past shocks, while VEP measures ex-post welfare loss due to shocks [37]. The definition of vulnerability given by Chaudhuri et al. [38] takes poverty as the state of a household being food insecure and uses food insecurity as a measure of welfare. This approach has been divided into three basic steps, i.e., identifying the welfare indicator; identifying the vulnerability threshold;

and measuring vulnerability. It uses consumption measures as a welfare indicator arguing that it provides a more adequate picture of wellbeing, especially in low or medium income countries. Consumption measures also have the advantage that they are accurately measured. However, rather than using mere consumption expenditure as in Chaudhuri et al. [38], an improvement over the measure could be by using the household consumption expenditure per adult equivalent (i.e., from both own production and purchases) as a measure of welfare. Various models including two-stage least squares regression analysis and Binomial Logit model [39], have been used for determining factors influencing household vulnerability to food insecurity. The major determinant of food security has been found to be the level of household income [40]. The purchasing power of households has also been found the most critical determinant for food security through access to the means to acquire food [41]. Hence, households which manage to secure larger incomes from any source, have better access to food than those which do not [40]. Likewise, a high dependency ratio is, expected to be negatively associated with food security as it increases the number of people to be fed by a few working household members [42]. The food security status of a household is also influenced by the age of the head. Some studies like Bashir et al., 2012 [43] have found a negative relationship between the age of household head and household food security.

### **13. DETERMINING THE EFFECT OF WOMEN EMPOWERMENT ON HOUSEHOLD LIVELIHOOD**

The sustainable livelihoods framework provides a comprehensive, and complex, approach to understand how people make a living. De Haan and Zoomers [44] summarized this by noting that the central objective of SLA (Sustainable Livelihoods Approach) was to search for more effective methods to support people and communities in ways that are more meaningful to their daily lives and needs, as opposed to ready-made interventionist instruments. This implies that the SLA, as an analytical tool, provides a better basis for understanding the relationship between people's resources, livelihood strategies and their desired livelihood. The framework is also useful for analysing most of the cultural-related gender concerns, since they form part of the transforming structures and processes [45]. According to Lakwo [45], the approach is suitable for analysing the constituent elements of women

empowerment as it is people-centred, and takes into account what they have and do as agents. Based on the SLA, livelihood assets are the resources on which people draw in order to carry out their livelihood strategies [46,47]. However, in the context of women's empowerment, it argues that in addition to livelihoods assets, people need a sense of agency to achieve their livelihood outcomes. Therefore, households use their empowerment capabilities (i.e., resources and agency), not just capital assets, to pursue activities that will enable them to achieve the best possible livelihood for themselves. Therefore, in place of the different types of capital resources identified in the DFID (1999)'s [48] sustainable livelihood framework, women's capabilities (i.e., agency and resources) influence women's capacity to independently attain their desired livelihood outcomes. According to Mosedale [49] and Malhotra et al. [25], women empowered in one dimension are not necessarily empowered in the other. Based on the sustainable livelihood framework, women use their economic, social, political, familial, legal and psychological capabilities (i.e., resources and agency) to achieve livelihood outcomes.

### **14. CONCLUSION**

The benefits of the growing global economy have been unevenly distributed leading to wider economic disparities, the feminization of poverty, increased gender inequality through often deteriorating working conditions and unsafe working environment especially in the informal economy and rural areas. Strategies should be designed to enhance the capacity of women and empower them to meet the negative social and economic impacts, which may flow from the globalization process. Expanding women's economic opportunities means: more and better jobs for women across a wider range of sectors; a business climate that supports women in starting and growing businesses, and building their management and entrepreneurial skills; a financial sector in which commercial banks and microfinance institutions provide women with effective access to a range of financial services and products tailored to their needs, including credit and savings instruments; and, in times of high food and fuel prices, greater livelihood security for women, especially in rural areas and vulnerable environments.

### **COMPETING INTERESTS**

Authors have declared that no competing interests exist.

## REFERENCES

1. IFAD. Women and rural development. International Fund for Agricultural Development, (IFAD) Via Paolo di Dono 44, 00142 Rome, Italy;2011. Available:www.ifad.org, www.ruralpovertyportal.org
2. Lipset M. Some social requisites of democracy: Economic development and political legitimacy. *American Political Science Review*. 1959;53:69-105.
3. Rowstow W. The stages of economic growth. Cambridge: Cambridge University Press; 1960.
4. Bell D. The coming of the post-industrial society: A venture in social forecasting. New York: Basic Books; 1999.
5. Prakash D. Rural women, food security and agricultural cooperatives. ICA-Japan Agricoops Management Training Project for Asia. Rural Development and Management Centre; 2003.
6. Diouf J. FAO at work: 2010–2011. Women – key to food security. Food and Agriculture Organization of the United Nations. Viale delle Terme di Caracalla - 00153 Rome, Italy; 2012. Available:http://www.fao.org/docrep/014/am719e/am719e00.pdf
7. Quisumbing AR, Brown LR, Feldstein HS, Haddad L, Pena C. Women: The key to food security. Food policy report. The International Food Policy Research Institute. Washington DC. 1995;1-14.
8. UN-Women. Rural women: United Nations entity for gender equality and women empowerment.;2014. Available:http://www.unwomen.org/en/what-we-do/economic-empowerment/ruralwomen#sthash.44PA7QTb.dpuf
9. Van den Bold M, Quisumbing AR, Gillespie S. Women's empowerment and nutrition: an evidence review. IFPRI Discussion Paper 01294. International Food Policy Research Institute; 2013. Available:http://www.ifpri.org/sites/default/files/publications/ ifridp01294.pdf.
10. Kabeer N. Resources, agency, achievements: Reflection on the measurement of women's empowerment. *Development and Change*. 1999;30(3): 435-464.
11. Narayan D. Measuring empowerment: Cross disciplinary perspective. The International Bank for Reconstruction and Development / The World Bank, 1818 H Street, NW Washington, DC 20433; 2005. Available:https://openknowledge.worldbank.org/bitstream/handle/10986/7441/344100PAPER0Me101Official0useOnly1.pdf?sequence=1
12. Kabeer N. Reflections on the measurement of women's empowerment-Theory and practice. In *Discussing Women's Empowerment—Theory and Practice*, edited by A. Sisask. 2001;17–54.
13. Oxaal Z, Baden S. Gender and empowerment: Definitions, approaches and implications for policy. Bridge Report No. 40. Sussex: Institute of Development Studies; 1997.
14. Keller B,Mbwewe DC. Policy and planning for the empowerment of Zambia's women farmers. *Canadian Journal of Development Studies*.1991;12(1):75-88.
15. Rowlands J. Empowerment examined, development in practice. 1995;101-107. Available:http://www.informaworld.com/smp/content~content=a713660810~db=all
16. Townsend J, Zapata E, Rowlands J, Alberti P, Marcado M. *Woman and power: Fighting patriarchies& poverty*. Zed Books Ltd, New York. United Nations Development Programm; 1999.
17. (UNDP). *Human development report 1995: Gender and Development*. New York and Oxford: Oxford University Press; 1995.
18. Scrutton C, Luttrell C. The definition and operationalization of empowerment in different development agencies. *Empowerment Note 2*; 2007. Available:http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CBsQFjAA&url=http%3A%2F%2Fwww.poverty
19. Malhotra A, Schuler SR. Women's empowerment as a variable in international development. In *Measuring Empowerment: Cross-disciplinary Perspectives*, edited by D. Narayan, Washington, DC: World Bank.2005;219–246.
20. Mayoux L. Sustainable micro-finance for women's empowerment. A report of the International Mutual Learning Workshop, 4-8 September, Chennai, India; 2006. Available:http://www.ilo.org/wcmsp5/group\_s/public/@ed\_emp/documents/publication/wcms\_117993.pdf
21. World Bank.*Engendering development: through gender equality in rights,*



- resources and voice, World Bank Policy Research Report, Oxford University Press, Oxford;2001.
22. Collett K, Gale C. Training for rural development: Agricultural and enterprise skills for women smallholders December 2009. City & Guilds Centre for Skills Development, 24-30 West Smithfield, London, EC1A 9DD; 2009. Available: [http://t4rd.skillsdevelopment.org/PDF/13 Training%20for%20Rural%20Development%20FINAL.pdf](http://t4rd.skillsdevelopment.org/PDF/13%20Training%20for%20Rural%20Development%20FINAL.pdf)
  23. Alkire S, Meinzen-dick R, Peterman A, Quisumbing A, Seymour G, Vaz A. The women's empowerment in agriculture index. World development. 2013;52:71–91.
  24. Alkire S, Meinzen-Dick R, Peterman A, Quisumbing AR, Seymour G, Vaz A. The women's empowerment in agriculture index. IFPRI Discussion Paper01240 December 2012. The International Food Policy Research Institute (IFPRI); 2012. Available: <http://www.ifpri.org/sites/default/files/publications/ifpridp01240.pdf>
  25. Malhotra A, Schuler SR, Boender C. Measuring women's empowerment as a variable in international development. Background Paper Prepared for the World Bank Workshop on Poverty and Gender: New Perspectives; 2002.
  26. UNHCR. Promoting Livelihoods and Self-reliance Operational Guidance on Refugee Protection and Solutions in Urban Areas. United Nations High Commissioner for Refugees. OSTs / Livelihood unit, Rue de Montbrillant;2011.
  27. Haque M, Islam TM, Tareque I, Mostofa G. Women empowerment or autonomy: A comparative view in Bangladesh Context. Bangladesh e-Journal of Sociology. 2011;8 (2):1730.
  28. Binns T, Nel E. Beyond the development impasse: The role of local economic development and community self-reliance in rural South Africa. The Journal of Modern African Studies. 1999;37(3):389-408.
  29. Galie A. Empowering women farmers. the case of participatory plant breeding in ten syrian households. Frontiers. 2013;34(1): 58-92.
  30. Lovendal C, Knowles M. Tomorrow's hunger: A framework for analysing vulnerability to food insecurity. FAO- EAS Working paper. FAO, Rome.2005;05-07.
  31. Scaramozzino P. Measuring vulnerability to food insecurity. ESA Working Paper No. 06-12. Agricultural and Development Economics Division The Food and Agriculture Organization of the United Nations; 2006.
  32. Albert JRG, Collado PM. Profile and determinants of poverty in the Philippines. 9<sup>th</sup> National Convention on Statistics (NCS). EDSA; 2004.
  33. Shroff MR, Griffiths PL, Suchindran C, Nagalla B, Vazir S, Bentley ME. Does maternal autonomy influence feeding practices and infant growth in rural India?. Social Science & Medicine. 2011;73(3):447–455.
  34. Arulampalam W, Bhaskar A, Srivastava N. Does greater autonomy among women provide the key to better child nutrition? Swindon, UK: Economic and Social Research Council; 2012.
  35. Fafchamps M, Kebede B, Quisumbing AR. Intra house hold welfare in rural Ethiopia. Oxford Bulletin of Economics and Statistics. 2009;71(4):567–599.
  36. CARE. Women's Empowerment in Bangladesh: The emerging story of the SII. Atlanta, GA: CARE USA.2006;21.
  37. Hoddinott J, Quisumbing A. Methods for micro-econometric risk and vulnerability assessments. Social Protection Discussion Paper Series 0324. Washington, DC: The World Bank, Human Development Network;2003.
  38. Chaudhuri S, Jalan J, Suryahadi A. Assessing household vulnerability to poverty: A methodology and estimates for Indonesia. Columbia University Department of Economics Discussion Paper No. 0102- 52. New York: Columbia University; 2002.
  39. Bazezew A, Bewket W. Analysis of vulnerability to food insecurity in drought-prone areas of the Amhara Region of Ethiopia: Case Study in Lay Gaint Woreda. Eastern Africa Social Science Research Review. 2013;29(2):25-49.
  40. Bogale A, Shimelis A. A household level determinants of food insecurity in rural areas of Dire Dawa, Eastern Ethiopia. African Journal of Food, Agriculture, Nutrition and Development. 2009;9(9): 1914-1926.
  41. Ndobo F. Determinants of vulnerability to food insecurity in a South African Township: A Gender Analysis.

- Mediterranean Journal of Social Sciences. 2013;4(14):311-317.
42. Tawodzera G. Vulnerability in crisis: Urban household food insecurity in Epworth, Harare, Zimbabwe. Food Security. 2011; 3:503–520.
43. Bashir MK, Naeem MK, Niazi SAK. Rural and peri-urban food security: A case of district Faisalabad of Pakistan. WASJ. 2010;9:403-41.
44. De Haan L, Zoomers A. Exploring the frontier of livelihoods research. Development and Change. 2005;36(1):27–47.
45. Lakwo A. Microfinance, rural livelihoods, and women's empowerment in Uganda. African Studies Centre Research Report 85 / 2006. African Studies Centre, Leiden; 2006. Available: <https://openaccess.leidenuniv.nl/bitstream/handle/1887/11945/rr85lakwo.pdf>
46. Chambers R, Conway GR. Sustainable rural livelihoods: Practical concepts for 21st century. Institute of Development Studies Discussion Papers, 296, Cambridge; 1992.
47. Ellis F, Allison E. Livelihood diversification and natural resource access: Overseas Development Group Working paper 9. University of East Anglia UK;2004.
48. DFID. Sustainable livelihoods guidance sheets, Department for International Development, 94 Victoria Street, London SW1 E5JL; 1999. Available: [http://www.efls.ca/webresources/DFID\\_Sustainable\\_livelihoods\\_guidance\\_sheet.pdf](http://www.efls.ca/webresources/DFID_Sustainable_livelihoods_guidance_sheet.pdf).
49. Mosedale S. Assessing women's empowerment: Towards a conceptual framework'. Journal of International Development. 2005;17:243-257.

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