



Role of Women in Agriculture: Linking Post-Harvest Wheat Yield Loss with Rural Livelihoods

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Abstract – The purpose of this study was to identify “Role of women in agriculture; linking post-harvest wheat yield loss with rural livelihood. The biggest segment of population is actively busy either directly or indirectly in agriculture sector. Females surpass men in many spheres of agricultural household tasks in conditions of their creative participation but habitually their labours go unrecognized at national level. The due acknowledgment of their role has been limitation by many factors but sexual characteristics is on the top where she has been passive not by talent but by cultural origin of gender. This study attempts to emphasize the obvious but indistinguishable tender of women in crop growing, and come up with the result that dispossess women to get access to creative resources and substantial livelihood earning. The study also propose that to defeat this tendency Pakistan has to extend women in agriculture on ideal basis in sort to perform the increasing population victuals strain, and at the similar time remain destructive globally in the present background. The study revealed the adjustment is a continuous process. During interviews women has faced this process and response in interviews. We conducted serve had in different district. An open ended form of questionnaire was developed to supply selected parameters of “Role of women in agriculture linking post-harvest wheat yield loss with rural livelihood”. The results indicated that continuously increasing demographics in the “Role of women in agriculture” and subsequent expansions in the supporting physical and non-physical infrastructure. This study identified the wage of labourer women which was average Rs. 200-250. Also identified per acre, per kanal agronomic yield loss and women working hours. The major finding of this study has been women labour contribution in micro financial and their rural living expenditure. Govt. they should encourage the situation of women in agriculture in the course of education and reasonable wages. There is need to support women to join hands in furthering the implementation of proceed agricultural actions.

Keywords – Women, Agriculture, Post-Harvest, Wheat Yield Loss, Rural Livelihoods.

I. INTRODUCTION

This study has been done in four districts Faisalabad, Lahore, okara, and pakpattan, Punjab territory of Pakistan. It is the biggest wheat-delivering territory. The present study completed to audit contemplates on the issue of post-harvest wheat yield losses and micro economic. In this study also talks about the participation of women in crops cultivation and seeding. Women works in fields at the time of cultivation and at the time of seeding .women works 6-7 hour in a day and maximum 5-6 days in a week.

Total cultivated area of Pakistan is 22.04 million hectares and the cultivated area of province Punjab is 12.05 million hectares and total number of farming families are 3.864 million (Agricultural statistics of Pakistan, 2011-12). Net cultivated area of district Faisalabad 515 Ha and net cultivated area of district Lahore is 114 Ha (irrigation department).

According to land utilization data 2005-2014 Punjab burro of statistics. We find these figures: 308908 Acers land is forest area in okara district. 23506 Acers are cultivable land. 33740 Acer uncultivable land. 43891 Acers net sown in okara district. 7771 Acers land is current flow. 251662 is total cultivable land. 214456 Acers land is used for kharief products. And 201091 Acers land used in rabbi products. Total cropped area is 415548 Acers, while total cultivate area is 251662, and overall total area of okara district is 308908.

Similarly in pakpattan district we find following figures in land utilization data 2005-2014 Punjab burro of statistics. 1541 Acers land is forest area in pakpattan district. 8727 Acers are cultivable land. 37510 Acers uncultivable land. 327270 Acers net sown in pakpattan district. 4018 Acers land is current flow. 337288 is total cultivable land. 286903 Acers land is used for kharief products. And 289292 Acers land used in rabbi products. Total cropped area is 576195 Acers, while total cultivated area is 331288, and overall total area of pakpattan district is 379066.

There are major two types of threshing traditional threshing and mechanize threshing. The post-harvest activities can be divided into two groups technical activities and economic activities. Technical activities; harvesting field drying, threshing, cleaning, additional drying, storage, processing. Economic activities; transporting, marketing, quality control, information and communications. Wheat losses are defined as a measurable decrease of the food quantity and quality. Quantitative losses are physical and can be measured in weight and volume, while qualitative loss can only be assessed. The post-harvest losses are estimated to be about 25 percent.

II. REVIEW OF LITERATURE

Pakistan's forthcoming gathered 2015-6 wheat harvest had conjecture at 25.5 million tons, unaltered from the reexamined record generation gauge (Raza, 2015). The Government has set up an obtainment focus of 6.6 million metric tons which has relied upon to raise government held stocks to a weighty 10.0 million metric tons toward the



consummation of the acquirement season in a couple of months. Wheat exchange assessments had to a great extent unaltered from year to year and Afghanistan remains Pakistan's biggest fare market, taking 600,000 metric huge amounts of wheat (as flour). 2015/16 rice fares are figure at 3.8 million metric tons, up somewhat from the amended current year gauge. 2013/14 Ended up being a disillusioning year for rice fares and rice stock levels are relied upon to keep gathering achieving a record 2.0 million metric tons toward the end of 2015/16 as Basmati fares confronts solid rivalry and fare request stays delicate.

A. Introduction

Wheat had one of the fundamental horticultural yields in Pakistan, with 80 percent of agriculturists developing it on a range of around nine million hectares (near 40 percent of the nation's aggregate developed area) amid the winter or "Rabi" season. This harvest alone contributed around 10.3 percent of quality included horticulture and 2.2 percent of the nation's total national output (Gross Domestic Products GDP) in 2014. 2015-16 wheat generation had figure at 25.5 million metric tons, unaltered from a year age's overhauled record creation. The expansion underway had because of auspicious planting, more prominent accessibility and utilization of watering system water, enhanced amount and nature of inputs and ideal climate conditions. 2014-15 creation is balanced upwards to 25.5 million metric tons, as per most recent administration of Pakistan figures. The Government of Pakistan has chosen to purchase 6.6 million metric huge amounts of wheat from the following harvest. Open acquirement organizations have been purchasing by and large around six million tons for as far back as couple of years and this choice is by all accounts an expectation with respect to the legislature to proceed with that pattern. The Government expanded the wheat bolster cost for the 2015-16 crops by eight percent, altering the cost at Rs. 1300 for every 40 kilogram (\$318 per metric ton). This had the primary increment in two years and had gone for boosting ranch salary and giving agriculturists an impetus to keep up planted region (Raza, 2015).

B. The Role of Women in Agriculture

A critical resource of agriculture has the economy, appearance constraints that reduce their productivity. Those women embrace about 43 percent of the agricultural labor force internationally and in developing countries. They demonstrate that female time-use in agriculture vary also by crop, production cycle, age and racial group. A few time-use surveys have data by doings and these show that in universal weeding and harvesting were mainly female activities. The involvement of women to agricultural and food production is considerable but it had been not possible to verify empirically the share bent by women. Women's contribution in rural labor markets varies significantly across regions, but habitually women are over represented in voluntary continuing and part-time work, and the available substantiation suggests that women has been regularly paid less than men, for the similar work (Doss, 2011).

The pre-harvest misfortune was controlled by picking the fallen grains and wheat heads in-side the consolidate territory. At enduring state pace of machine, it was all of a

sudden ceased and a steel casing was set before the mama chine. The shall ring misfortunes had discourage mined by picking the fallen grains, wheat heads inside the territory limited by the steel outline for three rate levels at various grain dampness for two chose wheat assortments. Regarding detachment misfortunes, three Zones of 7 m length and 4.4 m width were set apart in the field. At unfaltering state machine speed and uniform stacking, the grain and un-threshed material had gathered behind the reaper (Zaman et al., 1992).

Yield a higher extent of juvenile grains and represent a dampness peril, leaving no time for the grain to dry. At the business sector yard, the grain have shown in mass, sold, cleaned, packed away, weighed and conveyed to customers in sacks. The sustenance grain exchange relies on specialist. Along these lines, taking care of, transport and capacity of promoted grains in sacks is basic (Baloch, 1999).

Baloch, (1999) at the business sector yard, the grain have shown in mass, unloaded, cleaned, sacked, weighed and conveyed to purchasers in packs. The sustenance grain exchange relies on work. Hence, taking care of, transport and capacity of advertised grains in sacks is normal. In Pakistan, wheat is basically transported in creature driven trucks or carried on camelback. Expansive agriculturists use tractor driven trolleys and trucks. For every situation sacks are utilized for transportation. Transportation happens from ranch to market, business sector to buyer, business sector to makeshift stockpiling, interim stockpiling to long haul stockpiling and long haul stockpiling to buyers. Sorts of capacity, mud structures for the most part canisters or pots, wood or Bamboo structures, Metallic drums, canisters or compartments, small rooms reports by a FAO Food Security Mission in 1980 and a World Bank Grain Storage Project Mission in 1981 in Pakistan, attracted thoughtfulness regarding the potential earnestness of homestead stockpiling misfortune, especially for wheat (World Bank, 2007).

The World Bank Group's central goal has cut in stone at our Washington home office: "Our Dream is a World Free of Poverty." This mission supports the majority of our systematic, operational, and meeting work in more than 145 customer nations, and is reinforced by our objectives of consummation great neediness inside an era and advancing shared thriving in a reasonable way over the globe. There has been checked advancement on decreasing neediness over the previous decades. The world accomplished the principal Millennium Development Goal focus to slice the 1990 destitution rate down the middle by 2015-2010. In October 2015, the World Bank anticipated interestingly, that the quantity of individuals living in amazing destitution was relied upon to have fallen underneath ten percent. In spite of this advance, the quantity of individuals living in amazing neediness all inclusive remains unsuitably high. According to the latest assessments in 2012, 12.7 % of the world's populace inhabited or underneath \$1.90 a day. That is down from 37 % in 1990 and 44 percent in 1981.



III. MATERIAL AND METHODS

Study Area

The study was conducted in FLOP in each districts wheat cropping zone two villages from Faisal Abad district; 453 Akkan Wala village located Sumandary Tehsil and district Faisal Abad; from District Lahore village Mandyan Wala; from district, village 42-D Tehsil and district Okara; and from district Pakpattan village 73-D Pahunan Wala were selected.

A. Field Surveys

The selected study area was surveyed at least twice during the study period. The villages of district Faisalabad were survey on

B. Selections of Respondent Groups

The selected respondent groups comprised labourer women working in local villages of the selected district. The selected women respondents collect cereal grains and crop ears (wheat) from the fields that are left as post-harvest crop yield loss. The collected corps and ears thrashed manually in the filed by the laboures.

IV. DATA COLLECTION

For data collection following steps were taken.

A. Questioner Design and Validation

As mod of recording response of the respondent population, open-ended of questionnaire were designed (Annexure 1).

Where respondent were unable to record their response on the printed questioner, the prescribed question of the questioner where asked from the respondents in the form of an interview and the collected information was recorded on the questionnaire on behalf of respondent.

Table 4.1. Descriptive statistics of the parameters selected for assessing the loss in yield in per canal, per acre and its price in the area of Faisalabad, Lahore, Okara and Pakpattan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Per canal Agronomic yield.	0.75	0.2572	34.299	1	0.5	0.5	0.5	0.75	-2.266	0
Agronomic yield per acre kg.	3.4444	0.1616	4.6942	3.5	3	0.5	3.5	3.5	5.9765	-2.7057
agronomic yield per acre income Rs.	23.472	1.7445	7.4322	25	20	5	25	23.75	-0.4810	-0.72375

One is the major aspect related to study agronomic yield per acre it also describe per kg of the wheat. The average fraction of respondent that 3.4444% with the median value 3.5, mode 3.5, St. Deviation 0.1616, maximum 3.5, minimum 3 and range of 0.5. Standard error, kurtoses and Skewness are 4.6942, 5.9765,-2.7057 these respondent are showing in the table 4.1.

The next aspect is related to agronomic yield per acre it is also describe price of the wheat. The average fraction of respondent that 23.472% with the median value 23.75, mode 25, St. Deviation 1.7445, maximum 25, minimum 20

To keep validity of the collected data, the interview and recoding information the questioner Performa was subjected to audio video surveillance. The language of the questioner was English and Urdu the data was mainly collected quantity of crop grains and ears per unit time and its micro economic value as assets on the basis of current market value and as declared by the laboures. By the labourer

B. Compiling of Data

a. The recorded response on the close type of questionnaire was rated at a scale of one to five and where necessary, quantitative values were taken as recoded response. The information recorded on the questionnaire was transformed into quantitative data and compiled in the form of tables. The working hours of the labourer, quantitative estimation of the post-harvest yield and its quantities economic value were the main parameters of research.

C. Statistical Analysis of Data

a. The descriptive statistic were applied on the data by using Microsoft excel the main comparison were done by applying two way anova.

V. RESULTS AND DISCUSSION

The respondents in this study gave a mixed response about the loss in yield in the fields, as given in Table 4.1. It also describe about the price of the wheat. The average fraction of respondents that agreed the loss of yield is comprised 0.75% with the median value 0.75, mode 0.5, St. Deviation 0.2572, maximum 1, minimum 0.5 and range of 0.5. Standard error, kurtoses and Skewness are 34.299, -2.266, 0 respectively (N = 175).

and range of 5. Standard error, kurtoses and Skewness are 7.4322, -0.4810 and -0.72375 these respondent are showing in the table 4.1.

The respondents in this study gave a mixed response the yield collect in a day, as given in Table 4.2. It also describe the average fraction of respondents that agreed the agronomic yield collect in a day is comprised 3.722 with the median value 3.5, mode 3.5, St. Deviation 0.548, maximum 4.5, minimum 2.5 and range of 1. Standard error, kurtoses and Skewness are 14.730, 0.180, and 0.158 respectively (N = 175).

Table 4.2. Descriptive statistics of the parameters selected for assessing the agronomic earning of a woman per day. In the area of Faisalabad, Lahore, Okara and Pakpattan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Agronomic yield collect by a women in a day kg.	3.722	0.548	14.730	4.5	2.5	2	3.5	3.5	0.180	0.158
Agronomic yield collect in a day kg.	3.833	0.594	15.497	4.5	3.5	1	3.5	3.5	-0.472	-0.210



One is the major aspect related to study agronomic yield per acre it also describe per kg of the wheat. The average fraction of respondent that 3.833% with the median value 3.5, mode 3.5, St. Deviation 0.1616, maximum 3.5, minimum 3 and range of 0.5. Standard error, kurtoses and Skewness are 15.497, -0.472, -0.210 these respondent are showing in the table 4.2.

The respondents in this study gave a mixed response the working of hours in a day, as given in Table 4.3. It also

describe the average fraction of respondents that agreed the agronomic yield collect in a day is comprised 9% with the median value 9, mode 9, St. Deviation 0.594, maximum 10, minimum 8 and range of 2. Standard error, kurtoses and Skewness are 6600, 0.425, and 0 respectively (N = 175).

Table 4.3. Descriptive statistics of the parameters selected for assessing the working hours per day. In the area of Faisalabad, Lahore, Okara and Pakpatan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Working hours in a day.	9	0.594	6.600	10	8	2	9	9	0.425	0
Time for collecting agronomic yield per acre.	4.661	0.776	16.653	5.5	3.4	2.1	4.5	4.5	-1.076	-0.439

Next aspect is related to time for collecting agronomic yield per acre. Average value of those women’s that answered about quality is 4.661, Median, mode, Standard deviation of these students relatively is 4.5, 4.5 and 0.776. Maximum, minimum, range, standard error, kurtoses, Skewness and these women’s are in sequence is 5.5, 3.4, 2.1, 16.633, 16.653, -1.076 and -0.439 show below the table 4.3.

The respondents in this study gave a women involve in work from one family. It also describe the women in family and their time spend on work, as given in Table 4.4. The average fraction of respondents that agreed the loss of yield is comprised 2.389% with the median value 2, mode 1, St. Deviation 1.461, maximum 5, minimum 1 and range of 4. Standard error, kurtoses and Skewness are 61.150, -1.042, 0.628 respectively (N = 175).

Table 4.4. Descriptive statistics of the parameters selected for assessing about the number of women from a family and their time spend on work. In the area of Faisalabad, Lahore, Okara and pakpatan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Women involve in work from one family.	2.389	1.461	61.150	5	1	4	1	2	-1.042	0.628
A women work in a week. Days	6.556	0.856	13.051	7	5	2	7	7	0.136	-1.460

One is the major aspect related to study agronomic a work women in a week and days of the wheat. The average fraction of respondent that 6.556% with the median value 7, mode 7, St. Deviation 0.856, maximum 7, minimum 5 and range of 2. Standard error, kurtoses and Skewness are 13.051, 0.136, -1.460 these respondent are showing in the table 4.4.

The respondents in this study gave a parameters selected for assessing about per day salary of a women and domestic

expenditure, as given in Table 4.5. It also describe the average fraction of respondents that agreed the agronomic yield is comprised 200% with the median value 200, mode 200, St. Deviation 0, maximum 200, minimum 200 and range of 190. Standard error, kurtoses and Skewness are 0, 2.364, and 0.365 respectively (N = 175).

Table 4.5. Descriptive statistics of the parameters selected for assessing about per day salary of a women and domestic expenditures. In the area of Faisalabad, Lahore, Okara and Pakpatan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Per day wage of a women.	200	0	0	200	200	190	200	200	2.364	0.365
Women part of domestic expensive.	108.4	35.36	32.635	200	50	150	100	100	1.905	0.873

Next aspect is related to women part of domestic expenses. Average value of those women’s that answered about quality is 108.4, Median, mode, Standard deviation of these students relatively is 100, 100 and 35.36. Maximum, minimum, range, standard error, kurtoses, skewness and these women’s are in sequence is 200, 50, 150, 32.635, 1.905, and 0.873 show below the table 4.5.

The respondents in this study the labor wages are in the

labor rate of per acre. It also describe the women in family and their time spend on work, as given in Table 4.6. The average fraction of respondents that the labor wages rate of yield is comprised 198.61 % with the median value 200, mode 200, St. Deviation 5.892, maximum 200, minimum 175 and range of 25,. Standard error, kurtoses and Skewness are 2.966, 18, -4.242 respectively (N = 175).

Table 4.6. Descriptive statistics of the parameters selected for assessing about the labour wages rate in the labor rate of per acre. In the area of Faisalabad, Lahore, Okara and Pakpattan.

Parameters	Average	S. Dev	S. Err	Max	Min	Range	Mode	Med	Kurts	Skew
Labour rate of one day for a seeding women.	198.61	5.892	2.966	200	175	25	200	200	18	-4.242
Labour rate of per acre cultivation of a women.	900	0	0	900	900	0	900	900	28	-1.435

One is the major aspect related to study is labor wages rate in the labor rate of per acre. The average fraction of respondent that 900% with the median value 900, mode 900, St. Deviation 0, maximum 900, minimum 900 and range of 0. Standard error, kurtoses and Skewness are 0, 28,-1.435 these respondent are showing in the table 4.6. The current study identified post-harvest yield loss and its impacts on microeconomics especially in rural area conservation approach in selected study area.

The average per acre yield of wheat crop in Punjab is stuck to 30 maunds over the years hampering government’s efforts to gradually reduce the area under wheat cultivation to make it available for growing pulses and vegetables, official statistics show. At present Punjab is using its 17.143 million acres for wheat sowing leaving little space for nontraditional crops which fit into the idea of modern day farming with high returns for the farmers is hopeful to meet wheat production target for 2015-16 which are set as 19.5 million ton despite small reduction in sowing area as compared to last year. Wheat had been sown on 17.247 million acre in 2014-15 and 17.054 million acre in 2013-14. Last year wheat production was 19.282 million ton, according to the Agriculture Department. Punjab shares 76 per cent of country’s total wheat production. The Govt. in its efforts to increase wheat yield had distributed free of cost top quality seeds among farmers. It also spent Rs. 11 billion in terms of subsidy on fertilizers under Prime Minister package for farmers.

VI. CONCLUSION AND RECOMMENDATIONS

In this paper we collect the observed facts on “Role of women in agriculture; linking post-harvest wheat yield loss with rural livelihood. Women’s rank can be better by creation them earning family members. Women who contribute in straight line economic actions can phase a higher position within the family then those women whose behavior are confined for the mainly part to housework. Women play an important role in structure the societies on improved and stronger bases. Women include concerning 43 percent of the worldwide farming labour force and of that in rising countries, but this shape makes substantial distinction across regions and inside countries according period and common class. Women include partially or more of the agricultural labour power in a lot of Asian countries, but the split is much less in some. Wheat is the mainly vital food item of Pakistan, and living being the stick starves yourself of the people.

The present research suggests to lessons and organization the “Role of women in agriculture linking post-harvest wheat yield loss with rural livelihood”. The lessons conduct in different districts (FLOP) and recognized the labour

earnings of women which was average 200-250 Rs. This research also known per acre and per kanal agronomic yield loss and operational hours of women in field. The major recognition of this study is contribution of labourer women in micro financial and their rural home expenditure. Study listening carefully on compilation of agronomic yield loss from pasture by laborers women’s. Govt. they should encourage the situation of women in agriculture in the course of education and reasonable wages. It is terrible need of the time that awareness amongst stacks must be produced concerning the role of women in society. Government has by now started women reforms action chart but it is desirable that success of this program have to reach at local level. Women agricultural delegate should be preferred to address rural women and to Postponement Bridge the in order gap between rural women and study the role of rural women should be promoted during consciousness programs. There is need to support women to join hands in furthering the implementation of proceed agricultural actions.

REFERENCES

- [1] Agha, F.C., & Siddiquit, M.H. (2004). International Journal of Agriculture & Biology. PP 1560-8530-<http://www.ijab.org>
- [2] Ali, M.A., & Khalid, L. (2015). Grain Losses of Wheat as Affected by Different Harvesting and Threshing Techniques. International Journal, 20.
- [3] Ashfaq, M., Ashiq, H., Baig, I.A., & Saghir, A. (2008). Contribution of rural women in the farm productivity. The Journal of Animal and Plant Sciences (Pakistan).
- [4] ASMAT. (2015). Grain and Feed Annual. USDA Foreign Agriculture Service. This report contains assessments of commodity and trade issues made by USDA staff and not necessarily statements of official U.S. government policy.
- [5] Baloch, U.K. (1999). Wheat: Post-harvest operations. Organization: Pakistan Agricultural Research Council (PARC). Dostupno na: [[http://www.fao.org/fileadmin/user_upload/inpho/docs/Post_Harvest_Compndium_m_-_WHEAT.pdf](http://www.fao.org/fileadmin/user_upload/inpho/docs/Post_Harvest_Compndium_-_WHEAT.pdf)]. Datum pristupa, 10, 2015.
- [6] Begum, R., & Yasmeen, G. (2011). Contribution of Pakistani women in agriculture: productivity and constraints. Sarhad J. Agric, 27(4), 637-643.
- [7] Doss, C. (2011). The Women Role in Agriculture. The Food and Agriculture Organization of the United Nations PP 11-02.
- [8] Geneva (2011), Labor productivity ranking from ILO ministry of the finance Key Indicators of the Labour Market. 7th Ed. Table 17,
- [9] Hobbs, P.R., Sayre, K.D., & Ortiz-Monasterio, I. (1998). Increasing wheat yields sustainability through agronomic means.
- [10] Humphries, S.H. (1995). Women Labour Force Participation and the transition to the male-breadwinner family,. Economic History Review.
- [11] Khan, R. E. A., & Khan, T. (2009). Labor force participation of married women in Punjab (Pakistan). Journal of Economic and Social research, 11(2), 77.
- [12] Lechman, E., & Kaur, H. (2015). Economic growth and female labor force participation—verifying the U-feminization hypothesis. New Evidence for 162 countries over the period 1990-2012. New Evidence for, 162, 1990-2012.



- [13] Riaz, A., Muhammad, S., Ashraf, I., & Zafar, M.I. (2012). Role of Punjab rural support program in improving economic conditions of rural women through micro financing. *Pak. J. Agri. Sci*, 49(2), 211-216.
- [14] The 2008 World Development Report presented compelling empirical evidence from a wide range of countries that supports this finding (World Bank, 2007).
- [15] Verick, S. (2014). Female labor force participation in developing countries. *IZA World of Labor*.
- [16] Wasaya, A., Ahmad, R., Hassan, F.U., Ansar, M., Manaf, A., & Sher, A. (2013). Enhancing crop productivity through wheat (*Triticum aestivum* L.) -fenugreek intercropping system. *JAPS, Journal of Animal and Plant Sciences*, 23(1), 210-215.