Educational Research (ISSN: 2141-5161) Vol. 10(1) pp. 200-213, February, 2019 Available online@http://www.interesjournals.org/ER DOI: http:/dx.doi.org/10.14303/er.2019.234

Full Length Research Paper

Impact of Education on Farmers Earning: A House Hold Survey Data Analysis

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Abstract

There are wide ranges of benefits that promise education. Education has an important role in the development and growth of manufacturing, services and agriculture sectors. It not only improves earning in different sectors but also have vital role in developing social set up of an economy, improve health, empower women and fast adoption of advanced technologies. Present study investigates the impact of education on farmers earning. The primary data of 295 rural households is collected through stratified random sampling technique. A questionnaire relevant to education and earning of farmers is adopted for data collection and correlation coefficients and ordinary least squares (OLS) technique is applied to estimate the results. Mother' s education, livestock, agricultural technical education of respondent, own agricultural land, father education, spouse education and education of farmers are considered as independent variables. Empirical results indicate that Mother's education, livestock, agricultural technical education, own agricultural land, father education, spouse education and education of farmer have significant and positive association with earning of the farmers. The present study suggests that agriculture is a backbone of an economy, promotion and acceleration of agriculture can develop the economy of country. Development in agriculture can be made by educating the women; increasing quantity and quality of livestock, to gain farming related knowledge, to get own agricultural land by land reforms program and educated domestic background. So, Government institutions, non-government organizations (NGOs), the World Bank and international agencies should emphasis on education for all (EFA) programs with result monitoring progress and others factors to raise farmers income.

Keywords: Mother's education, livestock, agricultural technical education, agricultural land, father education, spouse education, respondent education, farmers earning.

INTRODUCTION

Education and earning are always associated with each other. Education plays a vital role in the earning of individual in agriculture as well as in other occupations. In many nations, the studies on education and earning explore that an average high educated people have more return than less educated persons. It is because; the educated individual can perform more tasks and can easily adopt the new technologies and skills. Educated individuals have more earning, more respect and more dignity in the society (Su, 2013). Education also enables farmers to take up other non-agri. opportunities to boost their earning (Vladimirova et al., 2016). It is well known that the nation's educated workers have great potential to catch up technologies rapidly. This is proven in Japan and other developed countries (Andaleeb, 2002). Development in agriculture sector is essential as according to the Government of Pakistan (2014), about 60% population of Pakistan resides in villages and gets their income from agriculture sector. Agriculture contributes 21% of GDP and it provides employment to 45% of workforce. It also helps to meet the food requirements of the nation. Due to the vital importance of agriculture in the country, it is necessary to develop this sector by raising the income of farmers. Education may develop production directly by adopting technological innovation and by improving skill of labor. As innovations with skilled labor will spread within the economy, it will boost up the production. This will lead economy to development (Weir, 1999). Education empowers farmers by raising their confidence, improving their livelihood and their involvement in processes of economic and social change. Education for farmers, land, infrastructure, skilled labor, and livestock are the powerful weapons for farmers to escape from poverty. Knowledge will not only increase production but also enable people to build their identity and to participate in social, economic and political life. Due to education, economy will move towards knowledge and technology and will get technology-based and education-based economies. So, education and training will become more crucial and gap between rich and poor will be minimized (Acker et al, 2009). Education will lead farmers to technical innovations, shifting towards high-return crops, scale economies, better market access condition, removing of less productive labor from farming and livestock production (Jayne, 2016).

Importance of agriculture sector cannot be denied as according to The World Bank report 2015, agriculture share was about 32 percent of GDP in most of Sub Saharan Africa (SSA) countries. So, due to importance of agriculture, SSA countries are focused to increase the income of small farmers by improving seed, fertilizers, agronomic training, irrigation technology, pesticides, and credit services to farmers.

Education and some other determinants have strong relation with the earning of farmers but at the same time agricultural earning depends on inputs e.g. technology, pesticides, herbicides and training etc. According to Pakistan economic survey report 2014-15, agricultural performance in Pakistan remained low due to some input factors. Factors behind this low performance includes low rate of education, slow rate technological innovation, less adoption of advanced farming methods, problems with quality, quantity and untimely input supply, low investment in construction of infrastructure, market problems, livestock disease problem and low availability of credit to farmers. Farmers' income in Pakistan is obtained from agricultural and non-agricultural resources. According to the GOP (2014), about 60% of rural labor force is connected to the farm sector. Agricultural land is main asset of farm sector and its division is skewed in Pakistan. It is an acknowledged fact that advanced inputs and technologies are essential determinants of agricultural earning. Provision food,

foreign exchange, market for industrial goods, raw material for industry and export surplus is directly related to agriculture (Diao, 2010).

Wanyama et al, 2010 classified farmers earning into Pull and push factors. Push factors are risk diminishing strategies, response to reduction of output and substitution steps for output loss while the pull factors include labor, land, education, working hours, decreasing farm sizes, diminishing market input-output price ratio and livestock. There is also much work that determines the farmer's income nationally and internationally that will be described in next section of the present study. The Present study has investigated the relationship between farmers earning and Mother Education, livestock, agricultural technical education, own agricultural land, father education, spouse education and respondent education other than the variables described above.

First chapter is relevant to introduction. Second part is about the previous literature on this study. Theoretical frame-work and methodology is discussed in part three of present. Empirical results and discussion are expressed in part 5. Last part is a discussion about the Conclusions of study and policy suggestion.

LITERATURE REVIEW

There are several of studies have been presented both nationally and internationally on the education and farmer's earning using time series, cross-sectional as well as panel data. But still this issue is needed to be presented more at micro level to suggest solid policy framework in future. Keeping in mind the importance in Pakistan at Tehsil level, the brief review of some empirical evidence from Pakistan and International economies is listed here:

Oduro et al., 2014 had estimated the effect of education on farmer's agricultural productivity. They observed data of 100 farmers from Municipality based eight farming communities. It was estimated that as the educational level of farmer increase, productivity also increased and there were highest agricultural productivity return at secondary level school education. Extension services showed greater impact on productivity than formal education. Finally, it was concluded that formal education broad the vision of farmers to farming while non-formal education handed on better farming techniques, open mind to adopt new ideas and innovations. It was suggested Government to improve the extension services access to input, credit availability to farmers and quality of formal education.

A descriptive study for farmer's efficiency with agricultural education was evaluated by Padhy et al., 2015. There were stated that in rural areas, farmers do not have up to data information on economic farming. It was said that by improving knowledge of farmers about technologies, new techniques and necessary physical resources can dramatically raise the efficiency of farmers. Increase in agricultural output for few years is not solution of problem; productivity must be sustained for coming hundred years. For this Authors suggested that farmer's education and adoption of new techniques about physical resources, water and soil never showed negative effect on productivity.

Khan et al., 2018 had conducted a study about the impact of credit on livestock income in Lasbela district of Baluchistan-Pakistan by using primary and secondary data. It was estimated that agricultural credit promoted livestock sector and enhanced farmers' income by 65%. Elasticity of credit was found greater than elasticity of household size and education level which was 11% for credit, 0.09% for household size and 0.05% for education level. It was argued to policy makers for making easy credit procedure for livestock. This will ultimately alleviate the unemployment and poverty in the region.

Kahiu, 2016 determined a descriptive study on “impact of farmers schooling on livestock productivity”. He gathered data from 70 farmers out of all Farmer Field School (FFS) of Machakos country. Data was analyzed by descriptive statistics included with mean, frequencies, regression and correlation. Study finding had indicated strong positive association between livestock productivity, socioeconomic and farmer’s knowledge for livestock rearing and Farmer Field School (FFS). After finding it was suggested that farmers should use pasture production and silage making technologies for better livestock productivity. It was also recommended to farmers for income saving strategies, training about nutrition of livestock, farm management and health of livestock. Biam et al., 2016 investigated economic efficiency of small farmers with Cobb Douglas stochastic frontier function in Nigeria. They adopted multistage sampling technique and collect data from 485 soybean producing farmers. They found 52% economic efficiency of farmers and found positive and significant relationship of education, experience and fertilizer with economic efficiency. They recommended that economic efficiency of small farmers will rise with improving educational levels**.** Ahmed et al., 2016 analyzed small farmer’s access to output market. For this purpose, they collected date from 576 small farmers in twelve districts of Punjab, Pakistan and achieved their goal with logistic regression. The results revealed that education, cost of transportation and market information are important factors that determine access to output market. They suggested education level, flow of market information and transportation facilities should be improved.

Jones (2008) measured the relationship between productivity and education by using Cobb-Douglas relationship. He used Ordinary least square (OLS) for weekly earning. He had found the answers of following questions in his study; were educated workers more productive than workers with no Formal education? Did earning differentials between workers with different Levels of education reflect genuine productivity differentials? Did the level of Firm technology affect the returns to schooling and the average productivity of workers? This survey was part of a nine-country (Burundi, Cameroon, Cote d’Ivoire, Ghana, Kenya, Rwanda, Tanzania, Zambia, and Zimbabwe). The data used in this analysis was from a panel survey of Ghanaian manufacturing firms. Interview was held with 1121 workers having different earning and education. He found positive correlation between productivity and schooling in his results. Bohne (2009) made a survey of 11280 households by collecting information on demographic, education, health, income and expenditure. This effort was about Agriculture, agricultural income and rural poverty in Malawi by using data of integrated Household Budget Survey. Through descriptive and bivariate correlation method he concluded considerable differences in farm income and rural poverty among districts in Malawi. Researcher observed highest poverty rates and lowest farm income in the southern districts while lowest poverty rates and higher farm income were observed in northern districts. These observations in northern districts were due to higher share of household involved in cash crop and food crop growing. After results it was recommended to promote agricultural activities among rural household through targeted projects with agricultural extension, irrigation and improved seed. It was also emphasized on promote export trade orientation, support of the state focus on the poorer farmer, access to credit and fertilizers, switch to food and cash crop for local trade.

Chaudhry et al., (2010) explored the effect of health and education on the earning of female at Pakistan. For this purpose primary data was collected from field survey of district Vehari. Data was gathered from 200 working females, 100 from rural areas and 100 from urban areas. By adopting OLS method the results of the

study showed positive and significant impact of education and health on female earning. On the basis of these results it was suggested to enhance health and education faculties for women to reduce poverty in both rural and urban areas. Javed and Ayesha, (2011) had investigated determinants as education, occupation, number of children and secondary earnings that affect monthly family income. According to the Authors, status of household head, number of family members, consumption and income were the significant factors of poverty level. The author suggested that skilled knowledge, special infrastructure and interventions are needed to uplift the status of women in the community.

CONCEPTUAL FRAMEWORK

There are number of factors that have positive or negative linkage between education and farmers earning. Present study will discuss the link of Mother' s education, livestock, agricultural technical education of respondent, own agricultural land, father education, spouse education and education of farmers with their earning. If mothers are educated then there will be transmission of education from mothers to offspring especially in daughters. Educated parents can give better environment to their children, which can produce creative skills to their children and pave the way for them to earn more (Havari et al., 2016). Livestock enhance farmer's income, as it provides food in the form of milk, meat and eggs. People can get income from the purchase and sale of animals, waste of animals is used for enhancing soil fertility, in some areas dung has been used as a fuel. Animals can also be used for farm equipment and transportation. Farmers can transform animal into cash by selling them so it is liquid cash instrument and alternative of insurance. It is asset sold them at the time of crises (Randolph et al., 2007). Chaudhry (2010) analyzed positive relationship between livestock and earning of the farmer. From animals, one can earn, not only in the form of milk and meat but also in the form of wool, leather, waste products of fuel and organic fertilizers.

When formers will adopt agricultural technical education, they will be well aware of modern farming techniques. Farmers will use chemical fertilizers, mono cropping system, pesticides, organic farming and drip irrigation system. Due to techniques there will be conservation of resources and reduction of cost. Pani, (2016) described owned agricultural land as economic asset. Land becomes cause of dignity, social status, freedom and voice of person. Land-owning farmers are more confident than landless farmers. They have easy access to loan and enjoy government schemes. Offspring of educated parents have better earning through many dimensions as they have better cognition, health and education. It has been seen inequality among generations due to discrimination of parent's education. Parent's education improves output efficiency of their children. Educated father have more knowledge to use time inputs and health inputs for better child quality (Lundborg et al., 2014).

A farmer earns more if his/her spouse is educated. Educated family has more ability to share information, better skills and more capacity to cope with change. They can better advice one another that could benefit partners' career. This implies better decisions about fertility, division of labor and consumption. So, due to healthy and educated domestic environment, farmers have better earning (Astrom, 2009). A farmer who has higher education is less likely to become full time farmer. He may be part time farmer or quit from farming. This will become cause of less or no earning from farming. But there may also be chances to have high potential to earn more from farming. If a farmer has high agricultural education, then he will be most likely to become full time farmer with high earning (Bratberg et al., 2008).

There are number of factors that affect the earning of farmers. As Li et al., (2003) found chemical fertilizer and use of machinery, are significant and positive determinants for agricultural production in China. Ahmed (2012) explored positive linkage of age, educational level of family head and ownership of assets for farmer's income in Nigeria. Henri-Ukoha et al., (2011) found determinants of farmer welfare at Nigeria. He concluded a positive relationship of income, physical assets and level of education with welfare.

MATERIALS AND METHODOLOGY

The primary data of 295 respondents is obtained through household survey and is collected through stratified random sampling technique form District Pakpattan, Punjab-Pakistan. In present study questionnaire shaped information is collected from 29 villages of Bahwalnagar road, Burewala road, Pakpattan road and Thrikhni road. Questionnaire was designed in English language but was asked to respondents in local language. Data is analyzed by tables, correlation, descriptive analysis and the regression technique Ordinary least square (OLS). Estimation and comparison of model is made by using software SPSS statistic 21. There were 30 Union councils in study area. The methodological framework and material is presented in this chapter.

MODEL OF THE STUDY

Model specification

It has been introduced the comparison of eight different variables and check their impact on farmer's earning in the sample.

General function of the model is represented as:

EARN=f (MRED, LVST, ATE, LND, FED, SPED, RED)

In order to convert general function into regression function, it is added error term into it as given below:

EARNING = + + + + + + + +

Here β'^{S} are coefficients of variables. These measures the % change in income of the respondent due to one unit change in each variable.

Description and construction of variables

Earning of farmers (EARN) is dependent variable. It includes earning from land, earning from livestock, earning from farming activities and earning from agricultural assets. Land earning means to give some land on rent or harvest own self, livestock earning means sale and purchase of animals, milk, meat and poultry, farming activities mean own self harvesting and sowing of crops while assets earning include earnings from Trolley, Tractor and land leveler etc.

Mother education (MRED) indicates level of mother's education measured in years. There is expected positive relation of mother's education and farmers earning. Livestock (LVST) is used as dummy variable, value 1 for farmers having livestock and 0 for others. Many studies show positive connection between livestock and earning. Agricultural technical education (ATE) is used as dummy, value 1 for those having technical education and 0 for those having not technical education. Farmers whose have taken agriculture subject in Metric or any agriculture training are considered as having technical education. Own agricultural land (LND) is also considered as dummy variable. Farmers having own agricultural land or not having own land are taken as 1 and 0 respectively. Father education level (FED) is measured in number of schooling years. Spouse education level (SPED) is also taken in number of schooling years. Respondent education (RED) is considered as

dummy variable, value 1 is awarded to those farmers whose have education and value 0 is given to those whose have no education. FED, SPED and RED should have positive impact on earnings.

EMPIRICAL RESULTS AND DESCRIPTIVE STATISTICS

Descriptive statistics

Present study investigates the impact of education on the earning of farmer. It has been made descriptive and econometric analysis in this section of study. It is discussed econometric results of earnings determinants.

Table 1: Correlations.

Pearson Correlation	Earning of farmer	Mother education	Livestock	Agri-Tech Education	Own agricultural land	Father education	Spouse education	Respondent Education
Earning of the farmer	1.000	.589	.150	.529	.262	.581	.544	.304
Mother education	.589	1.000	.022	.578	.139	.650	.539	.233
Livestock	.150	.022	1.000	.063	-.130	.028	-.041	.006
Agri-Tech Education	.529	.578	.063	1.000	.122	.429	.414	.138
Own agricultural land	.262	.139	-.130	.122	1.000	.237	.190	.114
Father education	.581	.650	.028	.429	.237	1.000	.607	.297
Spouse education	.544	.539	-.041	.414	.190	.607	1.000	.374
Respondent Education	.304	.233	.006	.138	.114	.297	.374	1.000

In Table 1 first row indicate correlation among dependent variable and all independent variables. There is strong correlation of dependent variable with mother education and father education which is 0.589 and 0.581 respectively. Second row reveals correlation among mother education and all other variables. Mother education has strong correlation with father education but has weak with live stock. Livestock shows negative connection with own agricultural land and spouse education but positive with others variables. Agricultural technical education mentions powerful association with mother education and weak with livestock. Own agricultural land have better connection with father education and negative with live stock. Father education is highly correlated with mother education. Spouse education is strongly correlated with father education and negatively correlated with livestock. Respondent education has grater correlation with spouse education but weak with livestock. In the table powerful correlation is between mother education and father education and weak is between livestock and respondent education. Dependent variable has not negative correlation with any independent variable.

Table 2: Descriptive statistic.

Variables	Mean	Std. Deviation
Earning of the farmer	33955.98	19945.319
Mother education	2.34	3.340
Livestock	.81	.395
Agricultural technical education	.21	.408
Own agricultural land	.83	.376
Father education	5.01	4.398
Spouse education	5.93	4.920
Respondent Education	.88	.324

Table 2 shows mean and standard deviation of defined variables. Table interprets high differences between earning of farmers, livestock, agricultural technical education, own agricultural land and respondent education. However, low differences are exited between mother education, father education and spouse education. In earning of the farmer standard deviation from the mean is 19945 which show high difference between earnings of farmers. Mean value of mother education is 2.34 and variability from mean is 3.34. Just like this mean value of livestock, Agricultural technical education, own agricultural land, father education, spouse education and respondent education is 0.81, 0.21, 0.83, 5.01, 5.93 and 0.88 respectively and variation from mean is 0.34,0.395, 0.408, 0.376, 4.398, 4.920 and 0.324 respectively.

Regression analysis

In this section estimation of results is stated by taking earning of the farmer as the dependent variable and mother education, livestock, agricultural technical education, own agricultural land, father education, spouse education and respondent education as the independent variables. Results are given below.

Table 3: Coefficient.

Variables	**Coefficient**	**T**	**Prob/Sig**
(Constant)	3353.461	.991	.323
Mother education	1224.290	3.397	.001
Livestock	7641.453	3.668	.000
Agricultural technical education	10711.959	4.327	.000
Own agricultural land	7368.527	3.273	.001
Father education	821.057	3.046	.003
Spouse education	728.934	3.259	.001

Respondent Education	5410.706	1.991	.047

Table 3 indicates that all variables have positive and significant effect on the farmer's earning. Mother education, livestock, Agricultural technical education, own agricultural land, father education and spouse education are significant at 1 percent level of significance but respondent education is significant at 5 percent.

In this sample, for mother education value of coefficient 1224.29 indicates that a farmer earns 1224.29 rupees more with each class increase in mother education. Children of educated mothers have cognitive skills through genetic transmission. All these factors lead to an individual towards better earning. Mother's education showed positive effect with log of earning per month (Cahudhry et al., 2010). Good and large quantity of livestock boost up the farmer's earning. Livestock has positive and significant association with the earning because having animals is an investment and have some return. Result investigates that a farmer can earn 7641 Rupees more with increase in each animal. Chaudhry, 2003 and Jan et al, (2008) analyzed same relationship between earning and livestock.

Agricultural technical education drives the earning towards rising. Through estimation it reveals that formers having technical education earn 10711.9 Rupees more than those having not such education. Agriculture technical education builds capacity of discovery, observation, exploration and adaption in the farmers. It improves skills and knowledge and builds self-confidence in farmers. Due to technical education, farmers learn about plant protection techniques, problems identification of crops, proper and timely use of fertilizers reduces cost techniques and high productions techniques. Present estimation is consistent with (Khatam et al, 2010). Farmers who have own agricultural land earn 7368 Rupees more than those who do not have own land. Agricultural land is an asset that provides security to farmers. Farmers who have own land get economies of cost reduction. In villages own land is a sign of prestige and honor for farmers.

Father education is significant at 1% level and value of coefficient shows that rise in each class of father education will raise 821 rupees of earning. Education is essential for the development family. It makes familiar, skilled, capable and expert. More educated fathers have encouraging attitude towards children's economic activities. All these above mentioned things drive the children's towards rising. Father's education play positive and significant role on farmers earning. This result matches with Lee et al, 2015. Spouse education plays positive and significant effect on farmers earning. Present study Estimates that 728.9 Rupees increase with each class of spouse education. Human capital is the combination of one's knowledge, skills and abilities, by which one can produce income. Education is an important path to get human capital. Skills, knowledge and abilities improve with surrounding people like spouse and friends. When human capital increases, earning also increases. That is why spouse education shows positive and significant effect on earnings. Present result is same as described by Zhao, 2015. Educated farmers can catch up technologies, skills and knowledge easily. Due this ability, their earning may raise. Present study analyses that an educated farmers earn Rs. 5410.7 more than those who are uneducated. Lauer, 2004 had also found same relationship between farmer's education and earning.

Table 4: Model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.725[a]	.525	.514	13907.038	.525	45.390	7	287	.000	1.997

[a]Predictors: (Constant), Education, Livestock, Agricultural technical education, Own agricultural land, Father education, Spouse education, Mother education.

In Table 4, the coefficient of multiple R mentions the degree of linear association jointly between dependent variable and independent variables. In this study R^2 = 0.525 estimates 52.5 percent relationship between dependent variable and all independent variables jointly. In multiple regression model "R" has little importance but meaning quantity is R^2. The coefficient of determination R^2 is important in a regression line for goodness of fit.

Table 5: Variance analysis of the model (ANOVA).

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	61450396442.159	7	8778628063.166	45.390	.000[b]
	Residual	55507438082.675	287	193405707.605		
	Total	116957834524.834	294			

b. Predictors: (Constant), Education, Livestock, Agricultural technical education, Own agricultural land, Father education, Spouse education, Mother education

In Table 5 statistical term is used to compare the mean of more than two populations. Econometrics is often using the tools of statistical inference. Thus here ANOVA use to source of variations (Sum of square). In this table there are three variations in dependent variable such as, due to regression (ESS), due to residuals (RSS) and total (TSS) with corresponding degrees of freedom.

SIGNIFICANCE OF THE STUDY

Many studies were made to discover the impact of education and other determinants on farmer's earning in different ways and in different areas by using different methods. Raza et al., (2014) had estimated the relationship of agricultural output with improved seeds, fertilizer consumption, and labor employed in the farm sector, number of tube-wells and tractors and water availability. Sharif (2010) concluded the effect of health and education on earning. But it had not been analyzed the impact of education on farmer's earning by using variables like mother' s education, quantity of livestock, own agricultural land, father education, spouse education, farmers technical education and farmer schooling years at rural Punjab, Pakistan. Present study has attempted to measure such relationship. This comprehensive work will pave the way for the researchers to explore other than determinants. It will also provide policy recommendations to policy making authorities to improve education and other facilities for farmers to increase their income.

CONCLUSION AND POLICY SUGGESTION

Agriculture is a backbone of an economy and it will boost up with the well-being and education of farmers. In present study, it has been seen the expected association of defined variables with dependent variable. After result estimation, it has been made policy recommendation with respect to the relationships of variables. In present estimation mother education, livestock, Agricultural technical education, own agricultural land, father education, spouse education and respondent education have shown positive and significant association with earning of farmers. It is said, to teach women means to teach family. Mothers can better care and guide their children. So, women education may become cause of development of an economy. Due to these, Govt. should made obligatory steps for female education promotion and start motivational schemes as monthly stipend, better job offers etc. for female education. Holding animals is an important economic sector because it provides dairy food products, meat, leather, stung for fuels and organic fertilizers. Due to the importance of livestock, Govt. should start supportive frame-work for farmers as interest free credit for purchase of animals, control prices for animals to avoid losses, animal insurances, training, free medication and vaccination and animals market. Agricultural technical education creates skill and informative knowledge about crops to farmers. So, it is need to expand agricultural technical institutions and agricultural research institutions in all areas of country. It should also be obligate for pesticide companies to provide agriculture training to farmers. Own agricultural land gives financial background and confidence to farmers. Government should start agriculture reforms and distribute land among farmers. Educated father wants educated children so, he provides resulting progress environment for education to children. One can get labor-market benefits, if his/her spouse is educated. Due to too much benefits of spouse education, it is proposed to married couple “to learn within married life.

No one can deny about the fruitful outcomes of education. Education is a powerful tool to make people’s lives meaningful and it increase people’s self-confidence by empowering people, by improving their livelihoods and by increasing their participation in social-economic change processes. Better educated farmers have better health, less chances to shocks, greater food security and better coping with social-economic instability. National governments, international agencies, the World Bank and NGOs should emphasis on education for all (EFA) programs and should be introduced adult education schemes in the country with result monitoring progress. There must also be coordination between agriculture and education ministries for capacity development agricultural education. Focus on agriculture education for the farmers will improve human capital and social-economic well-being of farmers. These measures will not only raise the farmers earning but also stimulate the economy of developing countries like Pakistan.

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