https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

Influence of Culture on Women Farmers' Participation in Agriculture Activities in Ahoada East Local Government Area of Rivers State

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Abstract— *The study examined the influence of culture on women farmers' participation in agricultural activities in Ahoada-East of Rivers, Nigeria. Six communities namely Odieke, Odisama, OgboIhuaje, Okpokudodo and Ihugbuluko were selected using convenience sampling technique. Purposive sampling technique was employed to select sixty women farmers from the selected communities. Interview schedule was used to elicit information from the respondents. Women participated in agricultural activities such as processing and fertilizer application among others. Traditional/customary influenced women farmers' participation on agricultural activities as women do not go to the farm on Eke day (x=3.29), women do not farm on burial day (x=2.80), among others. The people believed that farming during festival is a taboo (x=3.23) and norms demand women to return earlier from farm to carry out domestic duties (x=3.23). The study recommends that communities should carry out improvements in mainstreaming and transformation on cultural issues to enable women have access to productive resources.*

Keywords— Culture, women farmers', participation, agricultural activities.

I. INTRODUCTION

Agriculture has been seen as the most dominant sector for rural people in the rural areas of Nigeria and provides employment opportunities for about two-third of Nigerians. World Development Report (World Bank, 2008 in Food and Agriculture Organization (FAO), 2011) observed that agriculture is the main source of growth, as well as the key to development and also capable of bringing poverty to its lowest level among developing economies in the world. The report argued that where agriculture is given its place in an economy, it can create employment opportunities, boast food production, ensure food security and increase foreign exchange earnings among other prospects. In order for agriculture to succeed, this enviable task in Nigeria and Rivers State in particular, both men and women must participate actively.

Available records had showed that women constitute the major labour force in agriculture. According to Harun (2014) about 1.6 billion women living in the rural areas depend on agriculture for their livelihood. Several studies on Albert (2013); Emodi and Albert (2016) and (Tanwir and Safder, 2011) have shown that agriculture is one of the strategies used by women to improve livelihoods, reduce poverty and maintain a stability and sustainable family. According to Kelly (2006) rural women traditionally have played an important role in agriculture as food producers, and it was buttressed by Karki (2009) who observed that rural women contribute for about 50 percent of the world's food production and about 60 to 80 percent of the production in many developing countries. The contributions of women to agriculture and food production are significant. The National Policy on Women estimated that about 60%-80% of farm labour in agriculture is from women especially in food production, food processing and marketing. Apart from women working on family farms, some of the women are farmers on their own (Mtsor and Idisi, 2014). Rural women pursue multiple sources of livelihood as a strategy to manage or sustain complex households. The activities of rural women or women farmers are: working for wages in on-farm and off-farm businesses; producing agricultural crops; processing agricultural products and preparing food; tending animals; collecting firewood and water; involving in trade and marketing; taking care of family members and maintaining their homes (SOFA Team and Cheryl Doss, 2011).

In Nigeria as in most of the developing countries, not all women farmers participate in most of the agricultural activities. In some agricultural activities, they depend on the men folk to carry out most of the activities while in some

https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

other cases; they perform supporting roles in agriculture. In performing a helping role in the farm, it is important to note that women may not be willing to put in their best. When they fail to put in their best, the possibility of achieving the envisaged millennium goal of food production and revitalization of the economy may be distorted.

Culture and tradition have denied women farmers most times to adequately access and own land or acquire credit for their agricultural activities. There is need to boost women participation and ameliorate the factors hindering women active participation in agricultural activities in Nigeria and River state in particular. Different organizations and institutions as well as agricultural agencies have identified various factors militating against women participation to include weak women farmers' agricultural co-operative organization, inadequate finance, unfavorable or bad weather condition, inadequate government support, diseases, poor road network, inability to access modern agricultural innovations and technology, among others. One salient factor to women participation in agricultural activities that has not been adequately addressed is the aspect of culture and religion, the influence it has on women farmer's participation in agricultural activities. Culture is those values that guide people's tradition, norms, beliefs, customs, among others, that could forbid women from accessing and participating in agricultural activities rather creating male superiority and dominance in agricultural activities in rural communities. Many culture, mostly the rural institutions see and treat women as the weaker vessel or inferior of the species (Hora, 2014). Some discriminatory cultural practices are very common in the rural communities. These cultural value systems and norms such as women not allowed partaking in land ownership have made women not to exercise and participate in agricultural activities.

It therefore becomes necessary to examine the influences and effects of culture on rural women farmers' participation in agricultural activities in Ahoada East Local Government Area of Rivers State. The people are of Ahoada East are Ekpeye and speak Ekpeye dialect which is among the minor dialects in Rivers State and they are mostly engaged in farming, fishing and trading. Its culture is a complex mix of original Ekpeye, neighbouring Ijaw and influential Igbo cultures. Some deeply rooted Ekpeye people still live according to rules and practices formed since 1000 AD. They believe that a woman is married into a family and not to a man. If she becomes widowed, she would either have to marry her late husband's immediate brother or leave the family the way she came. Even though she has children or shared properties with her late husband, she would have to leave all of them with her husband's family including farm land. The excuse of the old practices to exhort wealth, properties, farmland and power from widows of male relatives hinders women participation in agricultural activities.

Most Nigerian rural women engage in most agricultural activities tasks that are meant for men however, the benefits gained could not commensurate the task performed (Oladejo, Olawuyi, &Anjorin, 2011).These rural women gather and burn bush, make ridges, fell trees, plant crop seeds particularly food crops including harvesting, transportation, processing and selling of farm products (Lawanson, 2008). They also participate in the task of weeding, land clearing, land-tilling, fertilizer/manure application, transportation, marketing, harvesting, and management of livestock as well as food processing. Despite these enormous contributions of women to agricultural development, culture has prevented women from accessing basic facilities, technology and factors of production that are necessary for agricultural production. This is the reason for the study. The study specifically sought to:

i. identify agricultural activities in the study area;
ii. ascertain level of women farmers participation in agricultural activities;
iii. examine the influences of traditions/customs on women farmer's participation in agricultural activities; and
iv. determine the influences of norms/beliefs on women farmer's participation in agricultural activities in the study area.

II. METHODOLOGY

The study area was Ahoada-East Local Government Area of Rivers State, Nigeria. Ahoada-East Local Government Area is among the 23 LGAs of Rivers State. It was created in the year 1996. There are three clans in Ahoada-East Local Government Area consisting of twenty-nine (29) communities namely Akoh, Ehuda and Upata. Akoh has 5 communities, Ehuda has 4 communities and Upata has twenty communities. First, six communities were selected from the 29 communities that made up the 3 clans using convenience sampling -two from each clan. The communities selected include: Odisama, Odieke, Ogbo, Ihuaje, Okpokudodu and Ihugbuluko. Secondly, purposive sampling technique was employed to select 60 women farmers from the selected communities-10 from each community. A reliability of cronbach's alpha value of 0.85 realized. The collected data were subjected to descriptive and analytical statistical techniques. The descriptive statistics include frequency counts, percentage and mean

https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

statistics while regression analysis was used to test the hypothesis.

The formula for regression analysis is given below as:

$Y = Bo + BiXi + ei$

Where:

Y = dependent variable – women participation in agricultural activities

X_i = independent variable — cultural influences (tradition/custom & norms/beliefs)

B_o = the intercept; B_i = slope; ei = the error term

III. RESULTS AND DISCUSSION

Socio-Economic Characteristic of women farmers in Ahoada East LGA

Table 1 shows that 32.2% of the respondents were between 51 and 60 years indicating that they aged, not neither in the productive nor reproductive stage. A higher number (42.3%) of the respondents stopped at primary education. Although the respondents can read and write and so can recall or tell history of their environment. More than half (53.57%) are married while 25.00% are widows, indicating that the respondents are married and so benefits from traditional land tenure system of the region and widows have enough experience on tradition/customs and norms/beliefs on them after the death of their husbands. A great proportion of farmers (91.1%) were subsistence farmers. This implies that women farmers in Ahoada-East LGA are mainly subsistence farmers. That means women farmers in the study area farm only for their consumption and sells only the surplus. This is in line with the study of Arowolo (2008) who stated that rural dwellers are mainly subsistence farmers. Also, 48.2% of the respondents had household size of 6-7 persons. This implies that the women have large household size which shows a true traditional African household size with an average of 8 persons per household. About 37.5% of the respondents indicated that their annual income falls within ₦101,000.00 and ₦150,000.00 and all (100%) of the respondents grow vegetable. This agrees with Albert and Okidim (2014); Albert, Harry and Ishikaku (2015) who observed that women in the study grow main arable crops of which vegetable was chief.

Table.4.1 Socio-economic characteristics of Respondents

Variables	Frequency n=60	Percentage	Mean
Age (Yrs)			
21-30	4	7.1	
31- 40	11	19.6	
41- 50	10	17.9	50 years
51- 60	18	32.2	
61 and above	13	23.2	
Total	56	100	
Marital Status			
Single	8	14.29	
Married	30	53.57	
Separated/Divorced	4	7.14	
Widow	14	25.00	
Total	56	100	
Educational level			
Non formal education	20	35.7	
primary school	24	42.9	
Secondary school	7	12.5	
Tertiary Education	5	8.9	
Total	56	100	
Household size (Persons)			
2-3	9	16.1	
4-5	16	28.6	
6-7	27	48.2	5 persons
8 and above	4	7.1	
Total	56	100	

https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

Income (₦)			
Less than 50,000.00	4	6.8	
51000.00 -100,000.00	11	18.9	
101,000.00 – 150,000.00	21	37.5	₦135,196.4
151,000.00 – 200,000.00	10	17.2	
Above 200,000.00	10	17.2	
Total	56	100	
Types of Farming			
Subsistence	51	91.1	
Commercial	5	8.9	
Total	56	100	
Types of crops grown			
Plantain	31	55.4	
Palm fruit	27	48.2	
Pepper	41	73.2	
Vegetable	56	100.0	
Orange	36	64.3	
Maize	48	85.7	
Okro	40	71.4	

Source: Field Survey, 2016

Types of Agricultural Activities in the Study Area

The result in Table 2 shows that all the listed agricultural activities in the study area namely: bush clearing, stick slashing, bush burning, ploughing, planting, climbing of tree, fertilizer application, harvesting of palm fruit, weeding, watering of crops, spraying of insecticides, harvesting of crops, processing, marketing, preparation of yam tunnels, mulching, staking of yam, pruning, mounding, feeding of animals, construction of pen, cleaning of pen and vaccination were identified by the rural women farmers as types of agricultural activities in the study area.

Table.2: Agricultural activities in the study area

S/No	Agricultural Activities	Frequency	Percentage	Rank
1	Bush clearing	56	100	1st
2	Stick slashing	56	100	1st
3	Bush burning	56	100	1st
4	Ploughing	49	87.5	4th
5	Planting	56	100	1st
6	Climbing of trees	39	69.6	8th
7	Fertilizer application	42	75.0	6th
8	Harvesting of palm fruit	35	62.5	9th
9	Weeding	56	100	1st
10	Watering of crops	50	89.3	3rd
11	Spraying of insecticide/pesticide	48	85.7	5th
12	Harvesting of crops	56	100	1st
13	Processing	56	100	1st
14	Transportation	50	89.3	3rd
15	Marketing	30	53.6	11th
16	Preparation of yam tunnels	48	85.7	5th
17	Mulching	40	71.4	7th
18	Staking of yams	30	53.6	11th
19	Pruning	50	89.3	3rd

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20	Mounding	32	57.1	10th
21	Feeding of animals	52	92.9	2nd
22	Construction of pen	56	100	1st
23	Cleaning of pens	42	75.0	6th
24	Vaccination	42	75.0	6th

Source: Field Survey, 2016. **Multiple responses**

Level of Women Farmers Participation in Agricultural Activities

Table 3 shows that the women participated in different types of agricultural activities such as processing (*x*=2.71), Planting (*x*=3.41), marketing (2 *x*=.82), transportation (*x*=2.82), fertilizer application (*x*=2.60), weeding (*x*=3.05), watering of crops (*x*=3.52), harvesting (*x*=3.05), mulching (*x*=3.01), feeding of animal (*x*=3.16), and cleaning of pens (*x*=2.62). This study is in line with the study of Ahmed & Hussain (2004), which stated that women are equally efficient in, weeding, storage, selling/marketing and harvesting of crops, fruits and vegetables. It also supported the findings of Emeya (2014), that women undertake most farming activities including land preparation planting, weeding and crop tendering, harvesting and sale of harvested farm produce.

Table.3: Women Participation in Agricultural Activities in the Study Area

S/N	Level of participation	Mean Score
1	Bush clearing	2.41
2	Stick slashing	2.08
3	Bush burning	2.41
4	Processing	* 2.71
5	Ploughing	2.30
6	Planting	*3.41
7	Climbing of trees	2.42
8	Transportation	*2.82
9	Fertilizer application	*2.60
10	Harvesting of palm fruit	2.21
11	Weeding	*3.05
12	Marketing	*2.83
13	Watering of crops	*3.52
14	Spraying of insecticide/pesticide	2.34
15	Harvesting of crops	*3.10
16	Preparation of yam tunnels	1.91
17	Mulching	*3.01
18	Staking of yams	1.88
19	Pruning	2.29
20	Mounding	2.18
21	Feeding of animals	*3.16
22	Construction of pen	*2.98
23	Cleaning of pens	*2.62
24	Vaccination	2.16

≥ 2.5 = participated
< 2.5 = not participated
Source: Field Survey, 2016

https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

Tradition/customs on women farmers' participation in agricultural activities

Table 3shows the traditional/customary influence on women farmers' participation on agricultural activities in Ahoada-East Local Government Area. They are: women do not go to the farm on Eke day(x=3.29), women do not farm on burial day (x=2.80), women do not farm on communal festival days (x=2.88), women do not inherit landed properties for agriculture (x=3.14), women do not climb trees (x=2.75), custom do not allow women to stake yams (x=2.82), women do not harvest palm fruit(x=3.13), women do not go hunting (x=2.92), women are not allowed to farm for six months after the demise of their husband (x=2.63), women do not go fishing (x=3.27) and women are not allowed to make decisions (x=3.00). All these traditions/customsdo influence women participation in agricultural activities in the study area. Preventing women to participate in some agricultural activities because of culture and tradition of the land would reduce agricultural produce in the study area.

Table.3: Influence of Traditions/Customs on Women Participation

S/No	Traditions/Customs	Mean Score
1	Women do not farm on Eke day	*3.29
2	Women do not farm on market day	2.48
3	Women do not farm on burial day	*2.80
4	Women do not farm on communal festival days	*2.88
5	Women do not own farm while husband is alive	2.32
6	Women are not allowed to make decisions	*3.00
7	Custom don't allow women to clear bush	*2.57
8	Women do not inherit landed properties for agriculture	*3.14
9	Women do not climb trees	*2.75
10	Women do not go to farm during menstrual cycle	2.32
11	Custom don't allow women to stake yams	*2.82
12	Tradition do not allow women to cultivate palm fruits	2.34
13	Women don't harvest palm fruit	*3.13
14	Widows are not allowed to farm for six months after the demise of their husbands	*2.63
15	Women do not go fishing	*3.27
16	Women do not go hunting	*2.92

≥ 2.5 = influence; < 2.5 = not influence

Source: Field survey, 2016

There is no significant relationship between women participation in agricultural activities and traditions/customs of Ahoada-East Local Government Area, Rivers State.

Table.4: Traditions/Customs on Women Farmers Participation in Agricultural activities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.655[a]	.429	.372	21.34561	.905

a. Predictors: (Constant), Traditions/Customs

b. Dependent Variable: Women Farmers Participation

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3420.567	1	3420.567	7.507	.021[b]
	Residual	4556.350	10	455.635		
	Total	7976.917	11			

a. **Dependent Variable**: Women Farmers Participation

b. **Predictors**: (Constant), Traditions/Customs

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Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	22.952	46.264		0.496	.631
	Traditions/Customs	.819	.299	.655	2.740	.021

a. **Dependent Variable**: Women Farmers Participation

The model summary result indicated that there is a moderate and positive correlation between traditions/customs and women participation in agricultural activities in Ahoada-East Local Government Area, Rivers State. This is evidenced on the value of the co-efficient of the correlation (R) which is 0.655. This value indicates that the strength of the relationship between the variables under study is about 65.5%. The co-efficient of determination (R^2) showed a value of 0.429 which indicates about 43%. This result implies that on the average about 43% variations in women participation in agricultural activities in the study area within the period under review is systematically explained by the influence of traditions/customs. Thus, about 57% variations in the women participation in agricultural activities in the study area remain unexplained by other explanatory variables. The unexplained variations are attributed to other external factors not included in the model.

The computed t-statistics for the study showed t-computed as 2.740. Using the conventional 5% level of significance, is greater than the critical value of t-statistic at 11 degree of freedom (df) is 2.2. Since the t-calculated is greater than t-critical value (2.740>2.2), we reject the null hypothesis and accept that traditions/customs significantly influence women participation in agricultural activities in Ahoada-East Local Government Area, Rivers State. On testing the fitness of the model, the F- computed (7.507) is greater than F-tabulated (4.96) at a significant level of 0.021. Thus we conclude that the model is statistically fit, significant and reliable for decision making.

The linear regression model formula can be stated as:

WFP = 22.952 + 0.8191TRDCSM + µ.

This means that the expected increase in each unit of women farmers' participation is influenced by 0.8191 value of traditions/customs of the study area.

Norms/Beliefs on Women Farmers Participation in Agricultural Activities

Table 5 shows that there are influences of norms/beliefs on women farmers' participation in agricultural activities in Ahoada East Local Government Area. The people believed thatghost and ancestral fathers farm on eke days(*x*=2.98) and so women should not go the farm on eke days, evil spirits attack farmers on burial days (*x*=3.10), norms demand women to return earlier from farm to carry out domestic duties (*x*=3.23), evil spirit slaps farmers when they farm during masquerade shows (*x*=3.30), women do not spray insecticides because is seen as a men's activity in the community (*x*=2.80), mermaid spirits prevent women worshippers from going to farm(*x*=3.00), farming during festival is a taboo (*x*=3.23) and crops will not grow if women farm during festivals (*x*=3.00). It implies that women in the study area were not allowed to participate in agricultural activities because of what the land or people beliefs. This finding is in line with the finding of Oladejo, Olawuyi, and Anjorin (2011), that local taboos had significant impact on the women participation in agricultural production.

Table.5: Influence of Norms/beliefs of the Study Area

S/No	Norms/Beliefs	Mean
1	Ghost and ancestral fathers farm on eke days	*2.98
2	It is believed that any women who climbs tree will lose her child to death	2.50
3	Evil spirits attack farmers on burial days	*3.10
4	Norms demand women to return earlier from farm to carry out domestic duties	*3.23
5	Women are not allowed to stake yam because it is believed as men's job	*2.96
6	Evil spirit slaps farmers when they farm during masquerade shows	*3.30
7	Women do not spray insecticides because is seen as a men's activity in the community	*2.80

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8	It is a taboo for a woman to go to farm in the evening	2.18
9	Mermaid spirits prevent women worshippers from going to farm	*3.00
10	Demons and evil spirits lives in forests and so women don't farm close to forests	2.30
11	Farming during festival is a taboo	*3.23
12	Women do not inherit properties because they are expected to marry and leave the paternal family	*3.32
13	Spirit possesses women who go to farm in the evening	2.13
14	Outing of Sculptures usually bring bumper harvest to your community	*2.79
15	Women do not go fishing because they can easily be drowned	1.95
16	Crops will not grow if women farm during festivals	*3.00

≥ 2.5 = An influence;< 2.5 = not influence

Source: Field survey, 2016

Norms/beliefs do not significantly influence women farmers' participation in agricultural activities in Ahoada-East Local Government Area, Rivers State.

Table.6: Norms/Beliefs and Women Farmers Participation in Agricultural Activities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.673[a]	.452	.398	20.90067	.974

a. Predictors: (Constant), Norms/Beliefs

b. Dependent Variable: Women Farmers Participation

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3608.536	1	3608.536	8.261	.017[b]
	Residual	4368.381	10	436.838		
	Total	7976.917	11			

a. Dependent Variable: Women Farmers Participation

b. Predictors: (Constant), Norms/Beliefs

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.333	46.408		.352	.732
	Norms/Beliefs	.821	.286	.673	2.874	.017

a. Dependent Variable: Women Farmers Participation

From the regression tables in table 6, the model summary result showed that there is a moderate and positive correlation between norms/beliefs and women participation in agricultural activities in Ahoada-East LGA Rivers State. This is reflected on the value of the co-efficient of the correlation (R) which is 0.673. This value indicates that the strength of the relationship between the variables under study is about 67.30%. The co-efficient of determination (R^2) showed a value of 0.452 which indicates that about 45.21%. This result implies that on the average about 45.21% variations in Women participation in agricultural activities in the study area within the period under review is systematically accounted for by changes in norms/beliefs. Thus, about 54.79% variations in the Women participation in

https://dx.doi.org/10.22161/ijhaf.2.3.8 *ISSN: 2456-8635*

agricultural activities in the study area remain unaccounted for by these explanatory variables. The unexplained variations are attributed to other external factors not included in the model.

The computed t-statistics for the study showed t-computed as 2.874. Using the conventional 5% level of significance, the critical value of t-statistic at 11 degree of freedom (df) is 2.2. Since the t-calculated is greater than t-critical value (2.874>2.2), we reject the null hypothesis and accept that norms/beliefs significantly influence women participation in agricultural activities in Ahoada-East Local Government Area, Rivers State. Similarly, testing the fitness of the model, since F-computed (8.261) is greater than F-tabulated (4.96) at a significant level of 0.017, we conclude that the model is statistically fit, significant and reliable for decision making.

The linear regression model formula can be stated as:

WFP = 16.333 + 0.821NRMBLF + μ.

This means that the expected increase in each unit of women farmers' participation is influenced by 0.821value of norms/beliefs of the study area. This corroborates the study of Adebola, Oladimeji, Koichi and Tadasu (2014) that culture has a stronger influence on women's access and control of productive resources than the mere biological differentiation of gender into male and female; and that there is a strong cultural influence among Nupe and Yoruba women as a result of the interplay of gender, ownership and decision making and culture on selected productive resources. It also supported the assertions of Biga (1997) and Marcela (2010) that there are serious constraints which militate against the promotion of effective role of women in those societies which are bound by age-old traditions and beliefs; and that there is a striking gender bias in favour of men when it comes to access to ownership of land, agricultural technology, information, training, financial services and all related productive resources.

IV. CONCLUSION AND RECOMMENDATIONS

There are different types of agricultural activities such as bush clearing, stick slashing, bush burning, ploughing, planting, climbing of tree, fertilizer application, harvesting of palm fruit, weeding, watering of crops, spraying of insecticides, among others in the area. Women in the area participated in processing planting, marketing, transportation among others. It is evident that cultural practices of the study area significantly influence women farmers' participation in agricultural activities. Women in the study area are encumbered by harmful traditions, customs, norms and beliefs which have significantly influenced their participation in agricultural activities in the area. In line with the findings, the following recommendations are made: Customary laws which seem obnoxious to women empowerment should be reviewed and refined to give women equal hands in participating in decision making with their male counterparts. Since women are the key food producers in rural areas, there is need to recognize women farmers who excel in farming. Celebrating success would give the farmers the motivation they need to keep working hard and this would consequently improve participation and productivity.

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