

## Checklist to Assess the Women Friendliness of the Technology

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Received on : 11.03.2020

Accepted on : 22.05.2020

### ABSTRACT

*It is realized, the interest of men farmers is dwindling in farming and they are migrating to earn ample income from non-farming activities. As per NSSO survey (2010), 40% of the men farmers want to quit farming due to less profitability. The Gaon Connection Survey (2019) revealed that about 48% farmers don't want the next generation to take up farming. In this situation, women have to look after the household as well as farming activities. Further, the Indian women spend 354 minutes a day, compared to 36 minutes by men on household activities including cooking and child care (Budlender, 2010). Despite the actuality that women are key producers of food, they wrap well behind men in ownership of agricultural land. They also lack access to and control over productive resources like: credit, market, inputs, information, technology, etc. While many of the existing empirical studies and literature on 'women in agriculture' suggest that women do have serious constraints in access to and control over resources such as land, credit, critical farm inputs (improved crop varieties, irrigation, fertilizers, etc.) training, information, marketing services, farm related decision making and agricultural groups (Aker, et. al. (2017), Hazel and Agnes (2015), Fletschner and Kenney (2014). Alkire, et. al. (2013). Study says that, if women had provided the same access to productive resources as men, they could boost yield by 20-30%; raising the overall agricultural output in developing countries by 2.5-4%. This gain in production could lessen the number of hungry people in the world by 12-17% (FAO, 2011). Again, women's access to technology has the prospective to urge their economic improvement. However, need based technologies can be familiarized to farmwomen subsequently judging its women friendliness. Keeping this in view, a checklist was developed to assess the women friendliness of the technology.*

**Keywords:** technology, women friendliness, access and control, checklist, statements

### Introduction

Agriculture sector employs 80% of all economically active women in India; they comprise 33% of the agriculture labor force and 48% of the self-employed farmers. According to Economic Survey (2017-18), with growing rural to urban migration by men, there is 'feminization' of agriculture sector, with increasing number of women in multiple roles as cultivators, entrepreneurs, and labourers. About 60-80% food are by rural women. According to Dash and Sarkar (2014-15), considering both cultivators and agricultural labourers, during 2001 and 2011, 28.9 million workers were added to agriculture including 22.7 million men and 6.2 million women which means female workers constituted 21.4 percent of incremental workforce in agriculture during 2001 and 2011. Their contributions were not acknowledged and so they were left out in development programmes. This has led to decrease in agricultural productivity (Odebo, 2008). This circumstance desires gender sensitization for gender mainstreaming and equality in order to prop up women with identical access to and control of productive resources, information and technology for sustainable and profitable farming.

Technology is indispensable to women's economic advancement, to swell their production, to generate new entrepreneurial ventures and access new income-generating pursuits. But, technology has been underused in unlocking women's money-making opportunities. Even though most low-income women in escalating countries are principally engaged in agriculture, an outsized literature shows that men have been the primary adopters and shapers of agricultural technologies in developing countries. As a consequence, women have less access to and control over the need based technologies and they carry on to use conventional, more labor-intensive methods, undermining their agricultural productivity.

**Women friendliness of a technology:** However, need based technologies can be familiarized to farm women subsequently judging its women friendliness. Hence, women friendly technologies can be identified from the pool of technologies by considering few parameters while judging. Also, a technology can be prepared women friendly by required modification in its base model making its software and hardware components very specific to her physique and location. For inspecting the women

friendliness of a technology, a checklist of a few identified parameters can be very useful. The parameters employed in the checklist can be revised by a researcher to assess women friendliness for a specific agricultural technologies.

**Standardization of the Checklist:**

The validity is ascertained for standardization of the checklist. The validity is measured by content validity. The content of checklist is validated through literature scan and expert's opinion who are working in the area of gender and development. The statements having at least and more than 80% expert's agreement are retained in the final checklist. As the relevancy weightage and mean relevancy scores of all the statements had discriminating values, it seemed reasonable to accept the checklist as valid measure of the desired dimension.

**How to use the Checklist?**

This checklist follows a gender analysis framework and is intended to be comprehensive, flexible and adaptable. The checklist consists of 14 statements/items to be used as check while assessing women friendliness of agricultural technologies. The equal weightage is assigned to each statement/item in checklist. The checklist statements may be administered to the any agricultural technology/technology inventor on two point continuums, viz. *Yes* and *No* with the scores of 1 and 0, respectively. The overall possible maximum and minimum scores are 14 and 0, respectively. Thus, women friendliness value of each response/technology ranges from 0 to 1 i.e. when it is lowest, the score will be 0 and when it is highest, the score will be 1. The higher women friendliness value indicate greater women friendliness of technology. It is calculated by following formula;

$$\text{Women Friendliness Value} = \frac{\text{Obtained Score}}{\text{Maximum Possible Score}} = \frac{\text{Outof14}}{14}$$

**Checklist for assessing women friendliness of agricultural technologies**

<b>A</b>	<b>General Information</b>	
A01	Name of the Institution	:
A02	Name of the Respondent	:
A03	Sex of the Respondent (M/F)	:
A04	Email of the Respondent	:
A05	Mobile No. of the Respondent	:
A06	Discipline & Expertise of the Respondent:	
A07	Did you or any member of your project team attend any training (minimum 3 days duration) related to gender/ women before?	( ) Yes ( ) No
A08	Do you or any member of your team have any experience of being a part of any gender/ women based programme before?	( ) Yes ( ) No
A09	Name of the Technology you worked with:	
A10	For how many men and women your technology has been used?	( ) Men ( ) Women
A11	How do you rate your technology?	( ) Women friendly ( ) Gender neutral

*Use the following checklist for assessing women friendliness of agricultural technology:*

Sl. No.	Statements	Weightage	Yes	No
1	Is it generated by considering the preferences of both the genders?	1/14		
2	Does it consider physical parameters of both the genders?	1/14		
3	Does it fulfil the location specific needs of both the genders?	1/14		
4	Is it compatible with the existing socio-cultural climate of the society?	1/14		
5	Is it easily accessible and affordable to both the genders?	1/14		
6	Is it simple to understand by both farm men and women?	1/14		
7	Is it easy to handle and operate by both farm men and women?	1/14		
8	Is it efficient to reduce drudgery of both farm men and women?	1/14		
9	Does it reduce workload of women?	1/14		
10	Does it boost efficiency and productivity of both the genders?	1/14		
11	Does it work with less and easily accessible inputs?	1/14		
12	Is it adoptable with the existing skill of both the genders?	1/14		
13	Is it flexible to get modified according to the needs of both gender?	1/14		
14	Is it having potential of contributing to any livelihood component of farm men and women?	1/14		

#### Relevance:

Introduction of technologies for development of farming community is a common agenda in almost all agricultural programmes. However, technologies are rarely considered before its use for farmwomen. So, impact of the technology is felt differently on men and women. Gender issues and concerns are neither considered in development of technology nor are farmwomen involved during its inception. Rather being gender sensitive most of the available technologies are gender neutral. Hence, care should be taken to test the women friendliness of a

technology before aiming women development through its introduction. So these checklists developed will help in relooking into the details of a technology through a gender lens for determining its women friendliness. This document will be very useful for research, extension and development workers in selecting the most appropriate technology for women thereby ensuring better penetration and adoption of it to rural women. Further, the checklist has been prepared for self-sensitization on how to look at women friendliness of a technology.

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