CHAPTER – I

INTRODUCTION AND RESEARCH DESIGN

Rural women play the dual role of housewife and mother along with that of primary producer, processor and seller of products from the family farm. In any farming system, the rural women is a central part of the human eco-system in which resources are produced, brought or gathered and transformed for use or sale by the family. Live-stock farms are a part of that eco-system, and rural women's role extends from her labour contribution to participation in decision-making about the choice of animals and poultry, their care and feeding, housing, breeding, marketing and the use of animal products. In the absence of adequate quantified baseline data, however, precise production responsibilities cannot be identified, and this makes it difficult to direct inputs appropriately.

Farm women play a significant role in agricultural production. A number of studies revealed that development has had adverse consequences on women in third world countries with accelerated development, women's work load increased. Status of women's work decreases and poor rural women have increased difficulty in meeting the subsistence needs of their families, with the result, often plagued by malnutrition. The development
process has actually made the day-to-day living of women a drudgery and misery by excluding them from access to modern agricultural techniques. It is disconcerting to note that development experts recognise women as 'reproducers' but ignore them as 'producers'.

In India, nearly 70 per cent of the male and 87 per cent of the female workers are dependent upon agriculture, livestock, forestry etc. for their livelihood. Women are engaged in a number of farm operations along with men. Activities such as application of menure, land preparation, seed grading, sowing, dabbling, planting, irrigation, fertilizers application, plant protection, harvesting, threshing, shelling, hulling, winnowing, cleaning and storing grain, feeding cattle, looking after milch animal, poultry and kitchen gardening are the main occupations of farm women. Community-wise women's participation in agriculture is higher among the tribals, than among the Scheduled Castes. However, social science researchers mention that the degree of participation declined with higher position in the social hierarchy. Women play a significant and crucial role in agricultural development and allied fields including crop production, livestock production, horticulture, post-harvest operations, agro/social forestry, fishing etc. The nature and

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1 Ahuja, K. (1979), Women Workers in Rural Rajasthan, the H.C.M. State Institute of Public Administration, Jaipur, P.105.
extent of women's involvement in agriculture vary greatly from region-to-
region and even within a region, their involvement varies widely among
different ecological sub-zones, farming systems, caste, class, socio-
economic status of families etc.²

Women's work, especially in agriculture, has been made peripheral
and women's multiple roles in the rural economy have been ignored in the
androcentric environment of planning and policy making.

If development is a process of construction, we have two pillars, men
and women; but, the latter is structurally weak. It is hardly surprising, then,
that the super-structure becomes lop-sided. For the first time in forty years,
the significant contribution of women to the gross national product gets a
mention in the document of Seventh Five Year Plan. In the State of Tamil
Nadu, the agricultural sector absorbs 69.5 per cent of the total work-force
and 82.9 per cent of female workers.

Women contribute directly to almost importance of the problem
without being the direct beneficiaries of agricultural inputs, training or
capital. Irrespective of agrarian structures, women's work is buried in the

California, pp. 62, 73.
collectivity of a household or family. Women also perform more agricultural operations than men. In all the three crops, they work for more months in a year than men, and perform all operations except ploughing. During the agricultural season, the working day of the women is as long as fifteen hours including her house-hold work. Women's wages, however, are generally lower than men's wages and the operations done by men are done with practically no mechanical aids and are time-bound. The casualisation of female labour has been because of limited impact of overall growth in agriculture and the growing displacement of workers in the rural non-agricultural sector.

The women agricultural worker has rarely been recognised as a producer in her own right. Lacking land rights as an individual, the women worker cannot even cultivate land on behalf of a male member of the family or contribute her labour towards her own betterment. Most land tenure systems exclude women one way or other. Today when there is so much rhetoric about land reforms, one wonders why it is being applied only to men and not to women.³

³ Hansra B. S., Dhillon, D. S. (1995), "Role of Women in Agriculture and Other Allied Areas-the Indian Experience".
In the context outlined above, the female agricultural worker emerges as one with limited or no access to any productive resources (land, credit, skill upgradation etc.) or basic facilities or amenities and renders her invisibility in the agricultural economy. Her gender compels her to take up the less visible and less remunerative reproductive role and her caste limits her social network and despite the decreased contribution by the men (due to alcoholism, debt etc.,) she has to survive by her ingenuity and adaption for survival. She is, thus, asset less, is under-employed, under-paid, illiterate and under-nourished and lacking accessibility to credit and other needed resources.

Women are moving slowly from invisibility to visibility and are being recognized as developmental partners all over the world. As per the world economic profile, they form 50 per cent of the world's population, contribute 60 per cent of working hours and make up 30 per cent of the food production. Rural women play a significant and crucial role in agricultural development by their involvement in crop production, live-stock production, horticulture, sericulture, post-harvest operations etc.

Over the past few years, development of women has been receiving a special emphasis. However, in practice, it is staggering due to various
factors such as low literacy, the restrictive social structure, predominance of patriarchal society, lack of decision making opportunity and ability, low exposure to growth opportunities. Apart from all these, the major factor responsible for the lack of developmental impetus among women is their non-involvement in activities that result in income generation.\(^4\)

A large proportion of working women are in rural areas and their principal source of employment is agriculture. Majority of women in agriculture are working on their own account or as unpaid family workers and most of them do not have access to cash income.

The seasonal nature of agriculture and low productivity reduce demand for female labour and as a result forced idleness is higher among women than men. Women's productivity in agriculture also suffers from uneconomic holdings and subsistence nature of agriculture in which the family consumes the produce. Tasks performed by women are labour-intensive and mostly done by hand. This has evidently reduced the work efficiency of women. Regardless of these variations, there is hardly any activity in agricultural production.\(^5\)


Women in agriculture make up a substantial portion of the Indian rural population. Like men, they undertake various types of agricultural operations including the allied fields, such as livestock, forestry, plantations, fisheries etc. Broadly, they are engaged in these operations in three ways depending on socio-economic status of their family and certain other regional factors. They work as (i) paid labourers, or (ii) cultivators-doing labour in their own land as unpaid workers or (iii) menagers of certain aspects of agricultural production by way of labour supervision, participating in post-harvesting processing etc.

**Women's Participation in Agriculture**

Let us have a close look at the situation of the women agricultural workers in the hilly areas of Northern Uttar Pradesh. Here we find the ubiquitous poverty, what with few tracts of land fit for cultivation, restricting employment opportunities and reducing agricultural productivity, by reducing monthly earnings to a pittance; poverty and unemployment in the hilly areas have driven the men-folks to the cities and towns on the plains.

The catalogue of the variety of jobs done by the poor agricultural women labour in the hilly areas is virtually unending. When the corn becomes ripe for harvest, it is the women again who come to the field with
the sickle. After harvesting, in the case of marginal and small land holdings, paddy is threshed by stamping it by foot which sometimes leads to boils on the feet of women. This is followed by winnowing.6

A women's job in the villages is never-ending. The back-breaking chores begin in the weeRe hours and are not completed even as the poor mother goes to sleep late into the night. For the jobs are not complete even with harvesting, threshing and winnowing. She drives the produce in the sun, stores the grains, dehusks it by pounding and grinding it into flour. So the daily grind for the unsung house-wife-cum-mother-cum-worker goes on and on, unrecognised by national accounting.

Women play a significant role in Indian agriculture. According to 1981 Census, compared with 63 per cent of men, 79 per cent of female working population was actively engaged in agriculture. (33 per cent as cultivators and 46 per cent as agricultural labourers). Almost 50 per cent of the rural female workers were working as agricultural labourers, and 37 per cent as cultivators. The respective proportion of male rural workers was reversed with 55 per cent as cultivators and only 24 per cent as agricultural labourers. Women as agricultural labourers participate in several activities

6 Khan, M. A. and Ayesha, N. (1982), Status of Rural Women in India, Uppal Publishing House, New Delhi, P.120
such as seeding, transplanting, weeding, fertilizer application, selling, looking after the animals, kitchen gardening etc. Several of these operations are carried out by women only. Thus, by participating in the various agricultural activities, they directly or indirectly influence the course of agriculture and animal husbandry.

Women population is almost half of the adult population. They constitute one third of labour force but consume two-thirds of the world's working hours and yet earn only one tenth of the income and own only one per cent of world property (United Nations, 1975).7

An analysis of International Labour Organisation, Food and Agricultural Organisation and National Population Census data was carried out by Dixon in 1982 which revealed that women constituted 38 per cent of agricultural labour force in developing countries. For 19 countries of South and East Asia, Dixon (1982) estimated that 45.3 per cent of agriculture labour force comprised women. According to him, this figure, in fact, is an under-estimate because of defects in data collection which include under-counting of the contribution of unpaid family labour, under-estimate

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of seasonality of women labour and self-respondent of the interviewers who are, by and large, were menfolk.

**GROWTH IN AGRICULTURAL EMPLOYMENT**

During the past two decades, women’s share in total agricultural employment has increased dramatically; while, only slightly more than one in four agricultural workers were female in 1971 but by 1981, almost one in three were men. The same trend is evident among wage workers as there has been an increase in both the absolute number and the proportion of women.

Modern agricultural technologies appear to have increased the absorption of female labour per unit of agricultural land. Much has been written about the "displacement of female labour" in different regions and in different socio-economic groups within the same region.

The agricultural department should make some special efforts to help these poor women cultivators to come up in life and become an instrument of socio-economic transformation by contributing their mite from a rural area towards the agro-industrial development of this country. An average women works twice as hard as the average men. According to I.L.O
Geneva observation, "Women and girls are half the world's population but do work for two-thirds of the world's working hours" To arrive at this provocative conclusion, the ILO has taken into account work in the home as well as in field and factory.

In the popular imagination, women of the Third World look after their houses and raise children, while the men look after the land and raise crops.

The above-stated facts demand two things to be done for improving the status of rural women. The first one is to involve the rural women in generating household income through increased homestead production and the second one is to create opportunities for women's access to resources and decision making in the household. If the first one is efficiently organised through programmes, it is expected that the second one will automatically fall into the pipe-line. Once women can take leadership in increasing homestead production and can control the labour and other resources involved in it, their active role in decision-making in the family will be vital.

**Women Participation in Decision-Making**

The landed property being fully under the control of men, the women in the household has hardly any say in all matters pertaining to farming. But,

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the position is different in regard to small to marginal farms where women do play a part in decision making in regard to land use. A study of the Chambal Commend Area in Madhya Pradesh suggests that more than 30 per cent of farm women are consulted regarding the choice of crops to be grown, variety of seeds, fertilizer applications, quality of grain to be marketed etc. The degree of female participation in decision making as stated earlier is higher among Scheduled Castes, Scheduled Tribes and Backward Communities. In the State of Haryana, women are active in matters pertaining to animal husbandry rather than agriculture. For instance, they have a say in the purchase of draught and milch cattle, while in the case of choice and area of crops, investment and irrigation, purchase of land, giving and taking up of credit, they are seldom consulted.

However, it has been found by certain studies that women belonging to both small and big farms say nearly 70 percent, participate in crop production and participate in a bigger way in dairy management. In the State of Orissa, decisions on such activities as hiring of labourers, disposal of produce, purchase from market, variety of seeds to be used and use of tools and pesticides are jointly taken by men and women. It is the women who
control the income from the sale of vegetables from kitchen gardens. This brings us to the unique role played by women in animal husbandry.⁹

**Need for the study**

According to 2001 Census, of the female workers, 34.55 per cent are cultivators, 43.56 per cent are agricultural labourers and 4.65 per cent are engaged in live-stock, forestry and fisheries. In India, women work force is overwhelmingly engaged in agriculture both as main workers and as marginal workers. Investigations conducted in some selected States in India show that women play a significant role not only in agricultural development and allied fields including crop production, live-stock production, horticulture, post-harvest operations, etc., but also in non-farm operations and household activities. The fact is that women’s contribution in these sectors has either been largely ignored or inadequately acknowledged. Very few empirical studies have been made to examine the actual participation of farm women in agriculture and allied fields and more specifically in backward regions.

India is a vast country marked by different regions with diverse agro-climatic conditions. Hence it is important to conduct region-specific studies.

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The present study is conducted in Ariyalur District. Of the total female work-force in Ariyalur District, 85.35 per cent are engaged in farm sector either as cultivators or as agricultural labourers. The present region-specific study is conducted in Ariyalur District in order to examine the extent of participation of farm women in agriculture and allied enterprises, to probe into intra-regional variations in women's participation in agriculture and allied enterprises and suggest policy measures for effective participation of women in agricultural development.

There is need for region-specific studies to gain clearer and deeper insights into the extent of women's participation in agriculture and allied enterprises, problems confronted by them, and shifts in policy measures to be made to help them play a productive role and act as effective partners, along with men, in agricultural and rural development. The present humble attempt to make a micro-level study in the drought – prone areas of Ariyalur District is hoped, to throw light on the dynamics of women's participation in agricultural development and allied enterprises.

**Statement of the Problem**

The study was designed to investigate farm women's participation in crop-wise and operation-wise activities in agriculture, house-hold activities,
dairying and decision-making. On perusal of available literature, it is observed that no significant region-specific research work has been undertaken in the State of Tamil Nadu. An effort has been made to acquaint with the available literature having direct or indirect bearing on this study. The review has been organised under the following sections, viz.,

(i) Role of women in dairying and farm operations,

(ii) Role of women in decision-making.

Objectives

The present study has been undertaken, in Ariyalur District, keeping in view the following major objectives, viz;

1. To study the socio-economic profile of sample women farmers, vis-a-vis sample men farmers, participating in agriculture and allied activities, especially dairying;

2. To study the extent of participation of sample women farmers in crop-wise agricultural operations, dairying and household activities;

3. To assess the contribution of sample women farmers towards agricultural production and family income and compare their performance with that of sample men farmers and to examine the extent of women's participation in decision-making process in regard to agricultural operations, household and allied activities; and
4. To suggest, in the light of empirical study, strategies for effective participation of women in agricultural development in a drought-prone region.

**Hypotheses**

In tune with the above-stated objectives, the following null hypotheses are tested:

1. There is not much of significant difference between the extent of sample women's participation in agriculture and their socio-economic profile.

2. There is not much of significant difference between the size of land holding and per capita income of labourers.

3. There is not much of significant difference in the participation of sample women farmers in agriculture and their contribution to agricultural output and family income as compared to that of sample men farmers.

4. Decision making of Agriculture women workers is largely decided by their educational states rather than others.
Sampling Design

**Multi-stage stratified random sampling technique** is made use of in order to select the sample blocks, in the *first stage; sample villages and sample women and men farmers in the District in the second and third stages* respectively.

Ariyalur District, a drought-prone region in the State of Tamil Nadu, has been geographically demarcated into,

(1) Western,

(2) Central and

(3) Eastern regions.

In order to draw the sample selection of women farmers in the District, the blocks in the district have been classified into:

(1) high participation,

(2) medium participation,

(3) low participation blocks.

High participation blocks refer to those with 30 to 40 per cent of female cultivators to total cultivators. Medium participation blocks comprise those wherein the percentage of female cultivators to male cultivators is in
the range of 20 to 30 per cent and low participation blocks refer to blocks in which there are 10 to 20 per cent of female cultivators to total cultivators.

**Selection of Sample Blocks**

Of the three categories of blocks classified on the basis of percentage of female cultivators to total cultivators, one block each was selected from

1. high participation (of female cultivators),
2. medium participation and
3. low participation category of blocks.

From the high participation blocks, Ariyalur, in the Southern region of the District with 40 per cent of female cultivators to total cultivators, was selected from medium participation blocks, Thirumanur. In the eastern region of the District, with nearly 29 per cent of female cultivators to total cultivators was selected. And from the list of low participation blocks, Jayankondam, in the eastern region of the District, with 19.9 per cent of female cultivators to total cultivators, was selected. The three blocks selected are representative of the highest, medium and lowest participation of women cultivators in agriculture in the district and it is presented in Table 1.1
Table – 1.1

Sample Blocks in Ariyalur District

<table>
<thead>
<tr>
<th>Level of Women Participation</th>
<th>Name of the Sample Block</th>
<th>Region</th>
<th>Percentage of Female Cultivators to total Cultivators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest Participation (10 to 40 per cent)</td>
<td>Ariyalur</td>
<td>Western</td>
<td>40</td>
</tr>
<tr>
<td>Medium Participation (20 to 30 per cent)</td>
<td>Thirumanur</td>
<td>Southern</td>
<td>29</td>
</tr>
<tr>
<td>Low Participation (10 to 20 per cent)</td>
<td>Jayankondam</td>
<td>Eastern</td>
<td>19.9</td>
</tr>
</tbody>
</table>

Source: Field Survey Data.

Selection of Sample Villages

Of the three sample blocks selected, viz., (i) Ariyalur, (ii) Thirumanur and (iii) Jayankondam, representing the highest, medium and the lowest participation of women cultivators in agriculture, two villages were selected from each of the three sample blocks, comprising a total of six villages. From each sample village, a ten per cent sample of female cultivators, representing five size classes, i.e., (i) marginal farmers (0-1 hectares), (ii) small farmers (1-2 hectares), (iii) lower-medium farmers (2-3 hectares), (iv) upper-medium farmers (3-4 hectares), (v) large former (4 and above
hectares) were drawn from different castes i.e., Other Caste (OC), Backward Caste (BC), Scheduled Caste (SC) and Scheduled Tribe (ST). The total sample drawn from the six sample villages of the three sample blocks comes to 212. A detailed picture of the sample drawn is presented in Table 1.2.
Table – 1.2
Break-up of Sample Women Farmers in the Six Sample Villages of the Three Sample Blocks

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the Block/Village</th>
<th>No. of Women Farmers</th>
<th>Marginal</th>
<th>Small</th>
<th>Lower Medium</th>
<th>Upper Medium</th>
<th>Large</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>HIGH PARTICIPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ariyalur Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Koothur</td>
<td></td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>2.</td>
<td>Pilimisai</td>
<td></td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>II</td>
<td>MEDIUM PARTICIPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Thirumanur Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Keelakavatankurichi</td>
<td></td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>2</td>
<td>Elakurichi</td>
<td></td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>31</td>
</tr>
<tr>
<td>III</td>
<td>LOW PARTICIPATION</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jayankondam Block</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Ayyapa Naickenpettai</td>
<td></td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>Kattuprinigiyam</td>
<td></td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>5</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td></td>
<td>47</td>
<td>45</td>
<td>46</td>
<td>36</td>
<td>38</td>
<td>212</td>
</tr>
</tbody>
</table>

Source; Field Survey Data.
Selection of Sample Women and Men Farmers

In order to study the differential performance of women farmers vis-a-vis men farmers, a five per cent sample of men farmers from respective sample villages, comprising a total of 65, were selected to act as 'control group', Table 1.3 and Table 1.4 indicate the sample numbers of men farmers and women farmers respectively.

Table – 1.3

Sample Men Farmers

<table>
<thead>
<tr>
<th>Name of the Block</th>
<th>No. of Men Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marginal</td>
</tr>
<tr>
<td>Ariyalur</td>
<td>4</td>
</tr>
<tr>
<td>Thirumanur</td>
<td>5</td>
</tr>
<tr>
<td>Jayankondam.</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: Field survey Data.
Table – 1.4

Break-up of the Total Sample

<table>
<thead>
<tr>
<th>Name of the Block</th>
<th>No. of Sample Villages</th>
<th>Total No. of Farmers</th>
<th>No. of Sample Farmers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Women</td>
<td>Men</td>
</tr>
<tr>
<td>Ariyalur</td>
<td>2</td>
<td>1005</td>
<td>101</td>
<td>23</td>
</tr>
<tr>
<td>Thirumanur</td>
<td>2</td>
<td>585</td>
<td>58</td>
<td>17</td>
</tr>
<tr>
<td>Jayankondam.</td>
<td>2</td>
<td>538</td>
<td>53</td>
<td>25</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>2128</td>
<td>212</td>
<td>65</td>
</tr>
</tbody>
</table>

Source: Field survey Data.

The total sample drawn comprises 277 sample farmers; of which, 212 comprise sample women farmers and 65 sample men farmers.

Data Collection

Primary data were collected by administering a pre-tested, structured schedule to sample respondents. Field survey and interview techniques were made use of. Field survey was undertaken between the months of March to April 2010 when both the agricultural seasons (i.e., kharif and rabi) were over. In addition, secondary data were collected from published and unpublished sources such us reports, journals, plan documents etc.
Period of the Study

The present research covers one year say agricultural year 2009 – 10.

Tools of Analysis

The field research data were analysed with the help of appropriate statistical techniques. Besides, simple methods of analysis like averages, percentages, standard deviation, multiple regression analysis and ANOVA are made use of.

Limitations of the Study

Owing to time and resource constraint, the present micro-level, in-depth study is confined to the study of women's participation in agriculture in a drought-prone Ariyalur District. Results of the study may be generalised for the entire district, though the results may not be applicable to other backward regions. However, it is hoped, that the findings will throw light on the dynamics of women's participation in agricultural development in a drought-prone region like Ariyalur District.

The data pertaining to their income from agricultural and other allied sectors have been expressed from memory. They have not maintained any records. On the basis of the data provided by them there may be the possibility of under estimation or over estimation of their income.
Hence these inputs provided by the respondents are only approximate figures, any how the result of the experiments could not affect too much.

**Chapterization**

**Chapter – I** : Introduction – Women’s Participation in Agricultural and Allied Activities – Importance and Need for the study – Statement of the problem – Scope of the study - Objectives – Hypotheses – Methodology – Data Collection – Statistical Tools – Period of the study – Limitations of the study

**Chapter – II** : Concepts and Review of Literature

**Chapter – III** : Area Profile

**Chapter – IV** : Women’s Participation and Decision Making in Agricultural Activities

**Chapter – V** : Analysis and Interpretation of Data

**Chapter – VI** : Summary of Major Findings, Suggestions and Conclusion

Bibliography

Appendix