Public Works Programmes, a Strategy for Poverty Alleviation: The Gender Dimension

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## Contents

**Preface**

v

**Acknowledgements**

vii

1. **Overview of the Public Works Strategy**
   
2. **Public Works from the Gender Perspective**
   
2.1 Women's access to wage employment
   
2.2 The Gender Dimension of Infrastructure
   
2.3 Scope of the paper
   
3. **Women Workers in the Construction Phase**
   
3.1 Why women participate or don't
   
3.2 Programme strategies: facilitating or hampering women's entry?

4. **Infrastructure: How are Women's Needs Met?**
   
4.1 From planning to implementation: a gender perspective
   
4.2 Involving women in decision-making

5. **Conclusions: Does the Public Works Strategy Benefit Women?**

Annex I

24

References

27
Preface

Two decades have passed since work began on the inter-relationship between employment and poverty in general, and on the gender dimension in defining such a relationship in particular. As part of its efforts to evaluate strategies for poverty eradication through the promotion of productive employment, the Programme on Women and Social Groups of the Development Policies Branch, initiated a series of thematic assessments of various strategies and programmes implemented over the last two decades, including those that were carried out with the assistance of the ILO.

In the context of the ongoing debate on the feminisation of poverty, the main focus of this series is to examine the viability and effectiveness of poverty eradication strategies from the perspective of promoting broader gender equality. This raises a number of questions: (a) to what extent gender-specific constraints and characteristics have been taken into account and planned for; (b) how successful have the strategies been in expanding opportunities for women; (c) what lessons could be drawn for future policy and programme development; and (d) what are the emerging issues for an agenda of research and debate.

Labour intensive public works programmes have evolved as a major policy instrument for creating employment, in the short term, in situations of high, and seasonal, unemployment or underemployment, and for minimizing serious income and consumption shortfalls among certain segments of the population in times of crises such as drought and famine. During the past two decades, the International Labour Organization has led efforts, in collaboration with governments, donors and international development agencies, in designing strategies for employment-intensive infrastructure programmes. The infrastructure sector is regarded as having a large potential for employment generation, in view of its significant share in national public investment and international development assistance.

More recently, public works programmes have become a major component of Social Funds established by a number of countries to mitigate the negative impact of structural adjustment on the poor, especially in the short run.

While public works programmes have been widely advocated and implemented, their impact in terms of poverty alleviation has not always been adequately and rigorously examined. The extent to which these programmes have reached and benefited poor women has received even lesser attention.

Although it is widely admitted that women are over-represented amongst the poor, and that they face greater difficulties in escaping from poverty, women’s participation in employment-intensive works and access to wage employment is particularly limited. It is therefore necessary for both policy making and programme development to assess how, and whether, women have been able to share in the benefits of public works programmes.

As part of the evaluation series mentioned above, the present paper by Amelita King Dejardin, sheds light on the factors affecting women’s share of the direct and indirect employment benefits created by public works programmes, by drawing on the lessons of experience from selected ILO-assisted labour-intensive public works programmes in fifteen countries.

The major point made is that, while social and cultural barriers restrict women’s entry into wage employment, public works programmes themselves, by virtue of their strategies and modalities of operation can facilitate or hamper women’s participation in the programmes and therefore their share of benefits. In brief, the commonly held implicit assumption that a public works programme is ‘gender-neutral’ often works against women. Because poor women have greater social, cultural and economic disadvantages than poor men, distinct and deliberate measures are needed to ensure that a programme equally benefits poor women. Concrete examples of measures adopted by public works programmes to enhance women’s participation in construction and rehabilitation works are examined. A good part of these measures, such as social organization, participatory and consultative mechanisms, overall sensitivity to gender issues in wage structure and land tenure, do not fall strictly within the technical realm of infrastructure, but raise important policy choices which have to be confronted.

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1. **Overview of the Public Works Strategy**

Public works programmes have a long history. They were used during the Great Depression by today’s industrialized countries as a counter-cyclic policy instrument (Freedman 1989:2). At that time, massive government funds were channelled into public investment programmes in order to create work for people, thereby stimulating demand, aiding economic recovery and eventually reducing the slack in the labour market. The mobilization of indigenous labour for road, dam and land conservation was widespread in colonial Africa as far back as 1903, and most post-colonial states implemented labour-intensive projects in regions of drought and famine as a tool for crisis mitigation (Webb 1992:4). Several Asian countries (e.g. India, China, Bangladesh) have implemented public works programmes for many years. Such schemes have been used and advocated for alleviating both chronic and transient poverty in South Asia for centuries (Ravallion 1990:2).

While most public works programmes in Africa and Asia have in the past been used to respond to crises such as drought and famine, these schemes have evolved since the ‘70s into mainstream policy instruments for employment creation and poverty alleviation directed towards particular segments of the population. These schemes are viewed by their proponents as possessing the potential for improving household food security and level of living by offering income through employment while at the same time creating assets necessary for future growth.

The failure of economic growth to raise the levels of living of the poor population and to tackle sustained levels of unemployment and underemployment have compelled governments of developing countries to lean increasingly towards special employment creation and poverty-targeting schemes. Macro-level planning and sectoral projects have proven to be inadequate. Despite objectives to counter poverty, development policy makers have not led to tangible improvements in the living conditions of the poor. Moreover, special employment creation schemes sidestep the issue of inequity in asset and land distribution, often at the root of poverty but also often politically unfeasible, while providing rapid and immediate relief to poor households. In 1974, the United Nations Administrative Committee on Co-ordination, in its Special Report on the Employment Policies of the Second Development Decade, stated that “one of the better ways of finding a partial but rapid solution to the problem of poverty and unemployment is to institute what might be called a major programme of minor works in rural areas” (Garnier 1982:2). The implementation of public works schemes likewise has its political purpose. It helps allay social discontent because it is immediately visible and demonstrates affirmative action on the part of governments.

A crucial issue in poverty alleviation schemes concerns the extent to which these are able to target benefits to the poor, and only the poor. According to Ravallion (1990), public works have the potential for using work requirement to screen the poor because it imposes the cost of foregone income on participants. One would expect that cost to be lower for the poor. It allocates relief on the basis of one’s reservation wage rate. Only those with a reservation wage lower than the offered wage will volunteer for employment in public works. The effectiveness of the scheme of course depends on the degree of correlation between one’s reservation wage rate and the level of living of one’s household. In the absence of any other means of screening the poor, the wage rate (whether in the form of cash or kind) plays a critical role in self-targeting. Ravallion observed that low wages in the Maharashtra Employment Guarantee Scheme were effective in targeting the poor, and therefore in stabilizing consumption levels in low-consumption households. However, in drought-prone regions of Ethiopia, the wage rate mechanism did not exclude relatively wealthy households because even they were poor and food insecure in absolute terms (Webb 1992:51). For certain sub-groups of the poor population...
such as those who are unwilling (i.e. due to social stigma) or unable (i.e. due to physical handicap) to participate in public works, other policy instruments would have to be designed.6

There are many variants of public works. From the remuneration point of view, Webb (1992:8) grouped them into two general types: 1) Food-for-work (FFW), those which use food rations, (a) as a whole or part payment to individuals for work performed (typically related to standardized measures of time worked or output delivered); (b) as an individual incentive/reward for work performed (not tied to specific measures of work); or (c) as an incentive to `communal' participation (where individuals do not receive a payment but food is offered to the community for disbursement by the elders - for group consumption or storage as an emergency reserve); 2) Cash-for-work (CFW), those which remunerate project participants with cash wages. This study is concerned with public works as a strategy for transferring income (in cash or kind) through employment.

While commonly referred to as `public works', the programmes do not necessarily create public goods, such as roads, bridges, and school buildings. Certain public works programmes, such as the construction of village cereal banks or the control of soil erosion on private land may be publicly sponsored and executed, with a focus on labour creation, but may generate private goods. The outputs of such programmes are not limited to physical infrastructure such as irrigation canals and feeder roads but may include the improvement of environmental resources like afforestation and land terraces, and production facilities such as the poultry-rearing and rope-making centres under the ILO-executed projects in India. While public works programmes may be publicly supported, they may not necessarily be implemented by the public sector. Implementation may rest on private sector (`private works') and community-level (`community works') initiatives for the choice of programme elements, technical design, supervision of implementation, and labour hiring and employment arrangements.

Public works schemes are distinct from most special employment creation and poverty-alleviation schemes in that the former create direct wage employment. Most special employment creation schemes promote self-employment and entrepreneurship through the provision of training, credit, tools and equipment, extension services and market information (Muqtada 1989:4-5). Public works programmes are a means of creating a high volume of employment in the short-term in a situation of chronic unemployment and underemployment, and a way of responding to crisis situations (Garnier 1982:5-7). Factors such as shortage of capital, time needed for programmes to intensify and diversify agricultural production, cost of agricultural settlement, problems raised by agrarian reform, and limited opportunities for small scale industry hinder conventional investments in agriculture and industry from reducing underemployment and unemployment as rapidly and as substantially as the growing rural working population demands. Public works programmes can act as a shock treatment, creating a substantial number of mainly unskilled jobs for the totally unemployed or those underemployed part of the year. These programmes assist populations to cope with emergency situations such as in times of disasters (floods, drought) and acute political and social crises.

The direct (short-term) employment or income benefits of public works programmes have received the most attention and emphasis. And understandably so because the case for allocating resources to public works programmes rests heavily on the extent to which they are able to alleviate current poverty. In addition to the direct benefits, there are indirect, long-term benefits, arising through the assets created or effects on labour markets, and risk benefits to the poor. The effects of public works schemes on labour markets (e.g. upward pressure on agricultural wages and tenancy contracts) boost the multiplier effect on incomes of the poor. For instance, the Maharashtra Employment Guarantee Scheme and Bangladesh Food-for-Work are believed to have had positive effects on the `threat point' of the poor in bargaining over agricultural wages (Ravallion 1990:29-31). Ravallion (1990: 31-34) cited evidence from South Asia that shows the effectiveness of public works in stabilizing income from one season to another, and insuring the poor against the disastrous effects (e.g. consumption shortfalls, deaths, costly forms of adjustment such as sales of assets) of a sudden contraction in real incomes from other sources such as in times of famine.

Investments in infrastructure that directly enhance productive capacities (land development schemes such as water supply and irrigation schemes, prevention of soil erosion) can have a high economic return through increased agricultural output. Other infrastructure such as access roads from farms to market centers can stimulate and promote productive activities hence lasting employment. Social infrastructure (such as school buildings, health centers) creates some permanent jobs in addition to meeting the basic needs of rural communities. Of course, the extent to which these benefits are in

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6 See Ravallion 1990 for a discussion on the cost effectiveness of public works and of poverty alleviation instruments in general. Ravallion states that in some cases it might be more effective to make untargeted income transfers.
fact realized depends on other factors, among others the resources and developmental potential of the areas and the way the final infrastructure is put to actual use. A nother related issue is the extent to which the poor have shared in those benefits. There are conflicting assessments of how valuable the assets created by these schemes have been to the poor. Ravallion (1990:28-29) took the example of the Maharashtra Employment Guarantee Scheme of India and Bangladesh's Food-for-Work Program. On one hand, output effects arising from assets created appear to have been far from negligible, yet other observers have been more pessimistic about the rate of return to food-for-work projects. A common criticism of rural 'public' works schemes in India is that assets have often been 'privatized' with benefits going to the non-poor without charge. The experience of ILO programmes, however, has shown that the local resource-based and labour-intensive approach to infrastructure creation gives countries considerable scope for future employment creation through maintenance work and long-term, 'downstream' employment and income generation through the use of the basic infrastructure (Gaude et al. 1992:7).

To meet their employment/income generation objective, public works programmes depend not only on the scale of projects but especially on the possibility of using labour-intensive (labour-based) methods. During the past 17 years, the International Labour Office (ILO) has developed and promoted, with the financial assistance of multilateral and non-governmental development organizations and in collaboration with national governments, a labour-intensive and local-resource-intensive approach to public works programmes in Africa and Asia as a strategy for employment generation. The leading role which ILO has played in fostering labour-based methods is recognized by the World Bank and other international and donor organizations.

The labour-intensive approach to the production of assets, goods and other services involves the use of working methods and systems that optimize the labour content, usually through a cost-effective combination of labour and light equipment that meets adequate quality standards. Priority is given to local labour inputs, supported where necessary by equipment, rather than to (often imported) equipment inputs supported by labour. In 1982, the ILO adopted a wider, local-resource-based approach, which integrates local manpower with other human, material, financial, vocational and institutional resources and know-how accumulated in the public and private sectors or at the household or farm level. This approach aims at maximizing the use of locally available resources thus increasing local income-generation. At the same time it minimizes dependence on foreign resource requirements which typically cover the major part of construction costs, leaving maintenance to chronically inadequate national resources. Infrastructure works providing services to rural communities (e.g. rural feeder roads, irrigation canals, water supply schemes, economic and social facilities for villages) have been found by the ILO to lend themselves well to employment generation through labour-intensive methods (see Gaude et al. 1992:5).

The demand for labour-intensive public works programmes is enhanced on the one hand by deficient and deteriorating infrastructure combined with increasing degradation of environmental resources, and on the other by rapid population growth, low or negative labour absorptive capacity of the modern sector, low labour productivity in agriculture, and the contractionary effects of structural adjustment on employment. 7

Because infrastructure is one of the major economic sectors of least developed countries, the labour-intensive public works strategy has great potential as an employment/income-generating strategy. Construction, rehabilitation and maintenance works account for a significant share of gross domestic capital formation, contributing anywhere between three and eight percent to GDP. Governments assume varying degrees of responsibility for it and reserve a large share of their national budgets and most of their external resources (grants, loans) for infrastructure-related investments even if these meet only a small proportion of actual needs. Donors and development banks, while providing the inputs for construction, usually expect national sources to share the costs of operation and maintenance. The proportion of externally funded public infrastructure investments in LDCs (generally exceeding 50 percent and as high as 70-90 percent in some of the poorest countries) is likely to remain high throughout the 1990s. In Sub-Saharan Africa, infrastructure programmes absorb up to 70 percent of public investment expenditure and receive some 40 percent of total financial flows from international funding agencies. (see Gaude et al. 1992:6-7)

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7 The contractionary elements within structural adjustment programmes argue for employment-expanding measures parallel to adjustment measures both to limit the social costs of adjustment and to effectively utilize huge labour resources in building assets for economic growth. Increases in the ratio of capital versus labour costs run in favor of labour-intensive investments. A World Bank assessment of its experience in rural roads construction in Sub-Saharan Africa (Riverseon et al. 1991:18-20) observes that under suitable conditions, labour-based rehabilitation of rural roads is 15 percent cheaper than using equipment, with a 40 percent saving on foreign exchange. See von Braun et al. 1991 for a discussion on the conditions prevailing in Africa that argue in favor of labour-intensive public works programmes.
A major criticism against public works schemes is that the scale of operations of individual programmes may be too small to make a dent in the immediate unemployment and poverty situation. In Bangladesh, the Food-for-Work Programme generated employment equivalent to full employment of less than three percent of the rural work force despite its apparent massiveness (Muqtada 1989:6). This criticism may not be justified, though, considering the magnitude of problems which call for other development interventions. Muqtada (1989:6) identified other deficiencies associated with public works programmes: (i) a large percentage of 'illegal' beneficiaries, with decreasing proportion of funds going to the poor, unskilled, landless labourers; (ii) the short-lived and often relief character of programmes which does not enable access to any permanent source of income; (iii) poorly designed infrastructure and lack of maintenance; and (iv) possible long-run inequities since the benefit derived from infrastructure development is positively related to land and asset-size of rural households. He pointed out however that these difficulties relate to the lack of proper management and commitment and the failure to attain objectives rather than to the objectives and principles of the strategy itself. Webb (1992:5) also stated that the failure of programmes to transfer income or create assets is due to problems of design and implementation, related to capital, technical and administrative constraints, rather than to an inherent flaw in the strategy.

Public works programmes and institutions mandated to support labour-intensive works proliferate, indicating that these programmes have gained in status and visibility. Despite the currency of public works programmes, there are still several basic issues that remain to be agreed among actors: should workers be paid, and if so in what form (cash, food), and at what rate? should the programme produce public or private goods? how are the poor to be reached, identified or selected? who should bear the responsibility for maintenance of the assets created? Moreover, the precise impact of public works schemes on incomes and employment especially in the long-term is still difficult to assess because of the inadequacy of empirical evidence. Without the benefit of such information, current projects would continue to be largely experimental.

2. Public Works from the Gender Perspective

One of the current issues concerning poverty alleviation strategies is the extent to which these are able to reach and benefit women. Because of the structure of gender relations in a society, the social, cultural and economic constraints specifically confronting women and/or the inherent biases (favouring men) in development programmes, women, especially those who are poor, may fail to benefit from these programmes. It is for these reasons that some development actors have advocated projects which cater solely to women. However, others have argued that the best way to integrate women in the development process is to strengthen their participation in general or mainstream programmes. Such strategy puts women's interest at the core of institutional goals and in the mainstream of policies and programmes - not marginalized as 'special' concerns assigned to equally special departments or offices on women.

This paper focuses on the gender dimension of public works, a strategy that is supposed to address the needs of both men and women. The gender dimension encompasses two concerns, which are discussed below:

1. women's access to the direct wage employment benefits offered by public works; and
2. women's benefits from the assets created by public works.

These concerns are premised not only on the principle of gender equality. They are based on the fact that access to benefits from public works is mediated by gender differences with respect to the allocation of labour in both domestic work and production and with respect to access to and control over resources.

2.1 Women's access to wage employment

The distinctive feature of women's work throughout various phases of economic development up to the present is the primary responsibility for the production of goods and services within the household which sustain the family and help to reproduce its labour power (domestic production).
Women's participation in production outside the household (social production), on the other hand, has varied in different countries and over different phases of economic development. In pre-capitalist modes of production characterized by a low level of commodity production, the family was both the unit of production and of human production. The distinction between domestic and social production was not clear. Male and female roles in production were often interchangeable, often complementary. Female roles were commonly regarded as being determined by women's lesser 'muscle power', or a social consensus on the need (based on women's reproductive function and responsibility to care for the young, the elderly and the sick) to minimize women's exposure to danger and risks.

With the growing importance of the market (money) economy and the organization of production outside the household, this distinction became more defined. The prior domestic role of women constrained their entry into the market for wage labour. Norms prescribing female seclusion constitute a complicating factor. Women's 'reproductive' role and all other work undertaken to augment family real income, since unremunerated, became increasingly undervalued in a money economy. Wage employment became man's domain. The concept of 'family wage', which was won by the working class struggle in the 1800s in Europe, was based on the premise that the working men are the heads of households and should therefore be paid a wage that would allow them to provide for all other members of the family as non-wage earners. It was meant to prevent wives and children from having to work and compete with men in the labour market. The 'family wage' thus became a male preserve and women's labour was structured to be in the home. (see Chatterji 1984:1-2; Bryceson 1980:5-8)

In agricultural societies, the demands on women's labour may be grouped into the following broad categories: (a) tasks related to the reproductive role and maintenance activities; (b) own-account agriculture, characterizing the situation in a large number of African countries where women cultivate their own unit of land; and (c) joint family enterprise involving the 'household' land normally under the management of the male head of household. Whether or not a woman engages herself in wage employment or other non-farm activities, is related to the intra-household allocation of a household's labour and other resources among domestic and productive activities. Palmer (1991:20-41) has provided a framework for gender analysis of intra-household control and management of labour and land resources using the case of agricultural households in Africa. Control over the allocation of women's labour may be exercised solely by male heads of household, or may be shared or fully exercised by women. Households are not always an integrated production unit: in many countries in Africa, men and women cultivate their own land and crops, draw separate personal incomes and meet separate financial obligations. In such households, women and men have their respective economic opportunity costs that they experience individually when reallocating labour from, say farming one's own land, to farming the household land or to working in public works. Opportunity costs are also felt at the household level, as for example when a woman decides (or is compelled) to devote less time to food production and household work than to earning cash through wage employment.

Women's entry into the wage labour market is the result of a confluence of push and pull (supply and demand) factors. Impoverishment constitutes a most important factor in the supply of female wage labour (Chatterji 1984). It generates strong pressures which help overcome the social barriers against women's induction into wage labour. Rural poverty and the trends and structural adjustments in the agrarian economy of developing countries are extensively analyzed in the literature and need not (and could not) be elaborated here. The experiences across countries and regions are quite diverse and complex. Very briefly, one can point to the breakdown of traditional forms of production (e.g. failure of smallholder farms to be viable due to unfavourable terms of trade, lack of credit, difficulty in obtaining inputs, etc.; increasing landlessness due to the concentration of land ownership and expansion of commercial agriculture), declining real agricultural incomes, contradiction of agriculture vis-a-vis a rapid growth in the rural population, and long periods of drought as some of the developments which have compelled men and women to look for new or additional sources of income. In many areas, families adopt straddling strategies for survival: the family's resources (e.g. women and child labour) are allocated over a wide range of economic activities, sectors and geographical areas in order to maximize food security and cash incomes and also to minimize risks of income shortfalls in one economic activity.

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10 Chatterji (1984) examined wage labour trends in Indian agriculture during the period 1964/65-1974/75. She observed that while women's participation in the economy was declining, there was a high and rising proportion of female agricultural wage labour. A cultural wage labour represents the poorest section of the rural population. The increase in female agricultural labour was higher in the Eastern Zone which experienced the largest increase in the poverty ratio. High rates of agricultural growth were correlated with low rates of growth in female wage labour. Increased demand for labour especially in peak seasons in high growth areas was met by migrant, predominately male, labour. The absorption of female labour across operations was more random, suggesting that the cheapness of female labour, not gender specific skills, was the factor in the preference for female labour.
Women are disproportionately represented among the poor. They are especially affected by land shortage and tend to have a tenuous hold on land. Labour requirements for childcare and household work leave them little time for productive activities outside the household’s needs and assets. They have less access to productive resources and services such as credit and extension services than men. Women’s lack of education and training, biases against the employment of women and sexual definition of jobs into feminine and masculine jobs militate against women’s absorption into wage labour. Women heads of households (widowed, divorced and abandoned women; women whose husbands have migrated in search of employment) constitute a major disadvantaged group because they have children to support and usually have no other adult labour to rely on. According to the literature, the number of rural households headed by women is substantial (as in Africa and South Asia) and has been increasing over the past two to three decades. While impoverishment is a major force compelling women to search for wage employment, the desire to liberate themselves from male control at home over their labour and over human reproduction explains also why peasant women want to find jobs (Bryceson 1980). This struggle is based on having independent sources of subsistence through wage labour.

On the demand side, the undervaluation of female labour because of its subordinate status, and so its relative cheapness, in addition to other ‘female’ attributes (such as docility and hand dexterity), have acted towards neutralizing prejudices against female employment. During the Industrial Revolution, female labour was preferred because of its relative cheapness. Export industries in several Asian countries with a high concentration of occupations suited to ‘female’ skills (e.g. hand dexterity for assembly of electronic items, sewing skills) absorb female labour rapidly, and, because of their labour-intensity, profit from the cheapness of female labour.

2.2 The gender dimension of infrastructure

A gender differentiated analysis of the division of labour and of ownership and control over resources is also critical in determining who would benefit from the assets created by public works. Given women’s reproductive (childbearing and care) and maintenance (food preparation, water and fuel collection) roles, the availability and accessibility of clean water, fuelwood and social service facilities (health, childcare and education) are very important to women. This is a point that is widely acknowledged. Less visible and therefore commonly overlooked are the activities performed by women as economic producers.

Contrary to common thinking, the family is not always a single unit having its productive resources (of which land is a key resource) under a single management and control. Nor is the distribution of access and control over resources equal among its members, or between men and women. Let us take the case of Africa. Palmer (1991:17-26) has provided a gender analysis of access to land resources in Africa. Predominantly patrilineal, the majority situation is one of women obtaining usufructuary rights to land from their husbands’ lineage groups. The awarding of land use rights to women is meant to enable women to meet their economic obligations to the family which include supplying most or all of the family’s food. For this reason, the most common situation is that women tend to grow traditional foods, mainly for food self-provisioning and for local markets, while men grow food as a commercial staple, and where suitable, industrial or export crops as well. Under modern land registration, land titles are often granted to men as the head of household, and the head may informally allocate a unit of land to his wife and daughters. Men and women in the same farm household may manage fields separately or together. In eastern and southern Africa, women’s contribution is more often subsumed in the cultivation of household fields over which men have ultimate control. But there are many cases of wives having personal land use rights. There may be households which have individual fields as well as joint household fields. These distinctions are not necessarily rigid and combinations exist. For instance, in Kenya, with male migration in the 1980s women came to work in a wider range of crops including cash cropping (World Bank 1989:6).

Because women’s land rights are less secure than men’s, women often lose access to part of their land with the increase in the profitability of land due to agricultural modernization and land scarcity. Higher productivity methods such as irrigation schemes and the introduction of export and industrial crops have alienated some land and family labour from food production. To cite an example, after the completion of the Kano irrigation project in Nigeria, northern Nigerian pagan women were allocated smaller, inferior plots by their menfolks (Palmer 1991:18).

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11 Bryceson looked into the process of proletarianization of Tanzanian women.
2.3 Scope of the paper

This paper aims to do two things: (1) shed light on some of the main issues attendant to women's participation, as workers during the construction phase of public works programmes and as beneficiaries of the assets created, and draw guidance from the experiences of some programmes which have dealt with these issues; and (2) determine whether or not, and how, the public works strategy benefits women. Because of the scarcity of information on the post-construction or operating phase of public works programmes, this paper devotes most of its discussion on women's participation and benefits during the construction phase.

The gender dimension of public works encompasses two concerns: women's access to the direct wage employment benefits offered by public works; and women's benefits from the assets created by public works. As discussed above, there are important gender differences with respect to the allocation of labour in domestic work and production and with respect to access to and control over resources. These differences are likely to affect women's access to jobs and assets created by public works programmes. Within this framework, this paper addresses the following questions:

(a) as regards participation during construction: do women have the same access as men to wage employment in public works programmes? what factors and conditions enable them to gain equal access, and what prevents them from doing so? how have public works programmes tried to overcome the social barriers to women's entry into wage labour?

(b) with respect to women's benefits from created infrastructure: are women's needs and interests taken into account in the choice and design of infrastructure? are women able to participate in the planning and decision-making process of public works programmes? what are some of the difficulties and how have public works programmes overcome these?

The paper draws mainly from the experiences of 13 completed and on-going (as of December 1993) ILO-assisted programmes and projects in Africa and South Asia. All have been (are) implemented by governments, provided technical services by the ILO and funded by external donors. The studies on women's participation which were conducted within the framework of several of these programmes and projects, some organized and/or financed by the ILO and some by donors, constitute the primary and most valuable source of information for this paper. The fact that these studies have been undertaken, some in the early '80s, show that the gender issue in public works has been recognized as an important one. Other sources of information are project documents (e.g. evaluation reports) and studies by international organizations.

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12 The programmes/projects reviewed for this paper were either completed or on-going as of mid-December 1993, the time when data collection for this paper was terminated. For a brief description of each programme and project, please refer to the Annex. In learning from the experiences of these programmes/projects, it is important to bear in mind two things. First, they fall under two broad types: (a) special public works programmes (SPWPs) which are (i) multi-sectoral, consisting of different components and sub-projects (such as rural roads construction, irrigation, water supply, afforestation and soil erosion control) depending on the needs of the programme/project area, and (ii) area-based, being implemented by local government authorities falling under different ministries/departments; and (b) uni-sectoral projects, focusing on only one type of infrastructure (e.g. roads construction, irrigation) and being implemented by the line ministry/department responsible for such infrastructure in the country concerned. There are some variations in the methodologies developed under each type. Because SPWPs are multi-sectoral and involve local authorities, these programmes have devoted efforts to the development of mechanisms for local level community participation and a negotiating framework between public administrations on the one hand, and the private sector and representative organizations on the other. The uni-sectoral projects have given more emphasis to improving the capacity of sectoral ministries/departments from national to local levels to plan labour-intensive infrastructure programmes that respond to the needs of rural populations. The second point to remember about the programmes/projects cited in this study is that they differ with respect to date and timeframe of implementation. Some began as early as 1979 or 1980, others in the late 80s; some have more than one phase of implementation. Strategies and modes of implementing public works programmes have therefore evolved through the years, the latter programmes/projects reflecting the benefit of experience from earlier ones.
3. Women Workers in the Construction Phase

The proportion of women among construction workers of public works programmes varies not only between programmes and between regions, but also from one village to another and from one type of infrastructure to another within the same programme and within the same region or province.\(^\text{13}\)

The Ruvuma roads improvement project in Tanzania provides the earliest recorded information. From the start of the project in 1980 to October 1982, women’s share ranged from zero in Tunduru district to 25 per cent in Songea district (Kinkert 1983:12). During the first two years (1982-84) of the Burkina Faso Special Public Works Programmes (SPWP), women’s share of unskilled employment ranged from zero in one village to 22 per cent of total workdays in Konia and 43 per cent in Woro (Burkina Faso 1985:95).\(^\text{14}\)

Women comprised 30 per cent of unskilled labour in the Zambia (Northern Province) roads project in 1987-1989, 3.3 per cent in the Rwanda (Prefecture of Gitarama) SPWP in 1987-1989, 28 per cent in the Sudan (North Kordofan) SPWP in December 1988-March 1990, and an average of 57.5 per cent in the afforestation component of the Burundi (Ruyigi) SPWP in 1989-1991 (Zambia 1989:26; Rwanda 1989:66; Burundi 1992:74; Thordahl 1990:15). In India, the Tamil Nadu SPWP registered a 48 per cent women’s share of workdays created from late 1987 to end 1990, while the West Bengal SPWP registered 45 per cent (van Imschoot 1991: 33; Folke, et al. 1990:25). A study of the rural roads maintenance projects in M’beya and Tanga regions in Tanzania in 1989 noted from the payroll women’s participation rates ranging from 16 per cent to 59 per cent in M’beya and from 3 per cent to 54 per cent in Tanga (Scheinman et al. 1989:27-28).

In most cases, the rate of women’s participation in construction evolved and increased over the course of programme implementation as in the case of Rwanda, Burundi afforestation and Sudan programmes.\(^\text{15}\)

It is clear from the figures that the process of women’s participation in the construction phase is a complex and dynamic one.

3.1 Why women participate or don’t

In Africa, much of the information points to women’s domestic work (household work and cultivation of one’s own or family farm) as a major hindrance to their participation in public works. A mong non-participating women covered by a survey in Ruyigi (Burundi), more young and unmarried women than married women were interested in working in the SPWP (D’Haese et al. 1988:85). The primary reason given by non-participants in Ruyigi and M to Wa M bu (Tanzania) for not being interested in working in public works or for not seeking employment despite the desire to do so is the non-availability of time (D’Haese et al. 1988:62-71; Tomoda 1987:51; Kinkert 1983:18-23). A survey in Rwanda showed that while more than three-fourths of women regardless of age (except those over 60 years), civil status (or presence of infants were interested in working in the SPWP only less than a fifth would consider working throughout the year or even several days a week (Mukagatare et al. 1989:59,60-63; Correze 1989:16). In several areas (Ruvuma and M to Wa M bu in Tanzania, Rwanda, Burundi, Burkina Faso) most of the women construction workers were young (less than 30 years old) and unmarried (Correze 1989:16; M ukagatare et al. 1989:59; Guichaoua 1987:62; Kinkert 1983:12-13; Tomoda 1987:35-36; D’Haese et al. 1988:23-46, 59,85; Van den Oever-Perreira 1984:59-60).\(^\text{16}\) The young and unmarried are less encumbered by the responsibilities of managing households or caring for children and the sick. A mong married participants in Burkina Faso, it was

\(^{13}\) The average participation rate was not calculated as it would have been meaningless given that available data differ in timeframe and scope of activity. At this point, the important observation to make is the minimum and maximum levels of participation and the diversity in figures.

\(^{14}\) From hereon, documents without an author will be referred to by the country covered, or by “General” for those not dealing with a single country experience.

\(^{15}\) In Rwanda, women comprised 5.2 per cent in 1987, 8.8 per cent in 1988 and 26.9 per cent of workers in the forestry sites due to improved information and recruitment directed to women. On the roads construction site in Gitarama they made up zero and 2.7 per cent of unskilled and skilled work days respectively in 1988; in 1989, these figures shot up to 28.9 per cent for unskilled and 28.6 per cent of skilled work days (see Correze 1989:14-15 and Mukagatare, et al. 1989:54-57). In Burundi’s afforestation project (BDI/87/C04), women’s share of unskilled work days was 47.3 per cent in 1989, 52.4 per cent in 1990 and 72.9 per cent in 1991 (see Burundi 1992:74). See Masink 1991 for a descriptive account on Sudan.

\(^{16}\) A considerable proportion of unmarried participants in Ruvuma and M to Wa M bu had children. Their participation is related to their need to support their children.
observed that young newly married women without children participated more often than those with children.

Moreover, the general situation of unmarried and young women is one where they have no obligation to supply food to the household and therefore would not have their own land to till. Other than perhaps helping on the household land or their mother's, these women would have more available time or flexibility to work in construction. This situation was specifically observed in Gitarama in the early '80s: youths (men and women) constituted the majority of construction workers (Rwanda 1989:72-73).

Public works projects are usually carried out during low agricultural seasons when surplus labour is more available as well as in order to provide farm households an alternative or additional source of income. However, a perfect complementarity between the two activities cannot always be achieved. In cases where public works and agricultural activities coincide, a household may adopt various measures to combine earnings from both. Those who have no land to till may be allowed or encouraged to work in construction. Casual agricultural workers may be hired to replace family labour (often the men's) lost to the public works project but this is usually avoided or limited to a few tasks and days. A family may distribute the work among its members. But whatever the measures taken by the household, several studies point to the fact that it is the household head (male) who often seeks employment in public works and his major farming responsibilities (his labour) are often taken over by the spouse (D'Haese et al. 1988:34, 37-39, 73; Guichaoua 1987:62, 67-68, 90; Correze 1989:21-21; Rwanda 1989:72-73; Sierra Leone 1988:84; Kinkert 1983:33-34).

While household and farming obligations act as a major hindrance to women's participation in public works, there are married women and women with children who do seek employment in public works and there are programmes which have reported substantial numbers of such women among their construction workers. In the feeder road project in the Northern Province of Zambia and in the SPWP in North Kordofan, Sudan, married women represented a major portion of SPWP women workers (Zambia 1989:26; Massink 1991:9). A bout one-fifth and one-fourth of unmarried participants in the M to Wa M bu and Ruvuma projects, respectively, were single parents. The married women in Zambia re-organized their household activities or arranged for other family members to take over some of their tasks. Women carried their babies on their backs while they worked or brought an older child to look after their baby on the construction site and nursed their infants in between tasks (Zambia 1989:31). The turnover of women in the Zambia project was high however, indicating two things: that women worked primarily to earn an extra income and that they could manage to work outside the household for only limited periods of time (Zambia 1989:26). In Burkina Faso, women from larger households showed a higher tendency to work in infrastructure because household tasks could be rotated among the female members (Van den Oever-Pereira 1984:81-82). Where this arrangement was not possible, women used part of their construction earnings to pay others to carry out the non-remunerative domestic duties.

As the above shows, whether or not a woman engages herself in public works is not simply a function of the demands on her labour time at home and on the farm because these demands can be managed and manipulated. The process is more complex and dynamic than that. The participation in public works by married women or women with children and elders to take care of is a prime example. Even in an area such as the North Kordofan Province of Sudan where wage work for women is accorded low social status, women have come to participate in the SPWP.

Relevant information is not available on all the projects reviewed for this paper but the experiences of a few projects illustrate the complexity of the process.

In areas of job scarcity and poor agricultural incomes, women tend to have fewer chances than men or are less likely to compete with men in public works projects, especially where wage work has traditionally been reserved for men. The men of Ruvuma region in Tanzania would have been indignant if women got the scarce construction jobs because they considered it their role to provide the cash income of the household (Kinkert 1983:31-32). Kinkert observed that in Tunduru district of Ruvuma where incomes from agriculture were low due to poor land fertility and alternative job opportunities were very scarce, there was a high demand for wage employment by men and total non-participation of women in the Ruvuma roads construction project. However, in Songea district where

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17 Project activities require an administrative and logistical organization which is difficult to start and stop at a moment's notice. Certain activities have to be done at the same time as other agricultural activities (e.g. constructing of land terraces is best done at the start of rains in Rwanda). The situation is made more complex where different agricultural activities are undertaken within the same region and where cultivation activities observe different calendars (e.g. Sierra Leone, see Sierra Leone 1988:84).
men realized substantial cash revenue from growing tobacco, men were less interested in paid labour and women had a better chance in getting a construction job. In M atengo, coffee cultivation was profitable for both men and women, and thus almost nobody was willing to work on the roads project. The province of Ruyigi in Burundi is reported to have a situation similar to that in Ruvuma, Tanzania. Faced with a high unemployment rate, men would exert pressure on women not to compete for the scarce jobs in the public works programme.

A study of two regions, Mbeya and Tanga, in Tanzania which were both involved in a rural roads maintenance project, demonstrated how women's economic position and income-earning options determine their entry into public works (Scheinman et al. 1989:24-39). In areas where farming was lucrative and women had alternative income sources (e.g. seasonal work on coffee and rice fields), women tended less to work on the road and those who did, worked only for short periods to meet a specific income goal. In areas where farming was of subsistence level and where road maintenance provided the only non-farm source of income, women tended to remain as long as possible on the road. For many poor divorced women who had children and parents to support, roads maintenance provided them the sole stable source of income. So while working on the road was not a high status job and some men were embarrassed when their wives worked, for the poor without options, this social barrier was less important than earning an income. However, the participation of women with more earning options (better-off women) increased when wages increased, evidently tipping the scale in favour of earnings from public works.

Several public works programmes show that the poorest households participate most in public works, and workers from poor households tend to be women. Among the North Kordofan SPWP workers, a greater proportion of women than of men (43 per cent versus 25 per cent) came from the poorest households. The poor constituted 46 per cent among women household heads and 28 per cent among married women (Thorndahl 1990:24). In several irrigation projects in Nepal, it was the women from landless families, poor ethnic groups, occupational castes, and families living on marginal land who offered their labour for wages (Backer 1992:9,27). In the M beya and Tanga (Tanzania) roads maintenance projects, women's participation in road works was highest and longest in poor areas where there were very few alternative income sources and agriculture was of subsistence level.

A survey (Webb 1992:52-55) of selected projects in Niger showed a strong correspondence between intensity of participation (days worked) and selected indicators of poverty (income and livestock holdings) and identifies the following significant correlates of participation: (a) households with an undiversified income base and therefore heavily dependent on agriculture; (b) individuals with a low nutritional status; and (c) those households (typically the poorest, according to Webb) with a high child dependency ratio, high share of female adults and headed by a woman (driven by the need for an income to substitute for that not provided by male adults) (Webb 1992:52-55). A larger share of households was headed by women in the high-participation group (22 per cent) than in the low-participation group (10 per cent). Moreover, women constituted 50 to 90 per cent of participants of some rural works projects in Niger in the 1980s (Webb 1992:38). For female heads of household, unable to go far to seek employment due to their domestic responsibilities, public works within or near the village are often the best and only source of cash income.

Women generally spend their earnings from public works on basic household requirements: food, clothing, oil, soap, sugar, medicines, etc. Younger, unmarried girls, while also contributing to household expenses, tend to use a greater portion of their income on personal needs such as clothing and adornments. Some, those who have other sources of income, manage to use their incomes on nonsubsistence needs such as school fees, payment of debts, house repair or construction, purchase of tools and equipment for agriculture, hiring of agricultural labour, taxes and other periodic civic and social obligations (Tomoda 1987:50; M ukagatani et al. 1989:76-80; Correze 1989:19-20; D’Haese et al. 1988:54-57; Guichaoua 1987:89-90; Thorndahl 1990:24-25; Van den Oever-Pereira 1984:71-72; Webb 1992:74). Income, whether in cash or in kind, is an important, if not the primary, motivating factor in women's participation in public works construction. 

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18 Poorest households were defined as those cultivating land of 5 mukhammas or less. One mukhama is equivalent to 0.73 hectare.

19 Based on experiences in the M to Wa M bu irrigation project and Rukwa water supply project in Tanzania, the Gitarama SPWP in Rwanda, the Ruyigi SPWP in Burundi, the North Kordofan SPWP in Sudan, and the Burkina Faso SPWP.

20 Several studies cite the importance of cash to the women who work or would like to work in public works projects. For example, Tomoda's study (1987:49-50) of the M to Wa M bu irrigation and Rukwa water supply projects in Tanzania reports that women workers were most happy with the income-earning opportunity and that nearly everyone purchased basic consumer goods out of their earnings. The study of the Ruyigi SPWP (D’Haese et al. 1988:54-57) shows that women's earnings from public works represented about 90 per cent of their
3.2 Programme strategies: facilitating or hampering women's entry?

The factors of women's participation presented in the preceding section pertain to the social and economic situation of women, and are not within the direct control of a public works programme. Is a programme therefore powerless to enable poor women to find employment in public works if they so desire? Can a programme help women to overcome the barriers to their entry into paid construction work?

As discussed earlier, public works programmes have the potential for screening the poor because they impose the cost of foregone income which is lower for the poor. There is a lack of empirical information on how male and female labour responds to different levels and modes of payment or to what extent poor women may have been denied access to employment in function of the level or mode of payment in public works programmes. However, given that women tend to be less mobile (migration is predominantly male) and have fewer income options, and that women workers generally come from the poorest (therefore food insecure) households, one can assume that the opportunity cost (in terms of foregone income) would tend to be lower among poor women. At higher wage levels poor women would probably face stiffer competition with other potential job seekers.

The objective of a public works programme counts. Where the programme aims to stem (male) migration during the dry season, it would have to offer a competitive wage for their labour. This wage would be higher than where the objective is to assist the remaining work force, largely women.

Webb (1992:56-57), on the subject of self-targeting, stated: "Where food insecurity is a primary objective, ‘getting the wage right’ is the first step in ensuring optimum participation by the poor. Other administrative mechanisms may also be necessary...a) reducing the real value of the daily wage, b) expanding the scale of the project, c) delivering a large share of the wage in the form of a (less desired) food commodity such as red sorghum, or d) adopting a quota system that reserves a share of jobs or tasks for women." Self-targeting through setting low wage levels (i.e. close to or slightly below agricultural wage rates) has its limitations, however. Majeres (1993:20) has pointed out two: (a) going agricultural wage rates are very low in general and more so in situations of extreme poverty; and (b) in such situations, wages are often paid entirely or partly in kind with daily food rations already fixed at subsistence level. According to Majeres, these limitations necessitate the use of other targeting methods such as careful selection of poor areas, special targeting clauses in contracts with private contractors or executing institutions, or special selection criteria for particularly vulnerable or disadvantaged groups. Webb observed that one bi-product of successful poverty-targeting is de facto age and gender targeting because of the following: "a) women-headed households tend to be poorer than average, and their heads participate in the absence of male adults, b) even in poor male-headed households women participate where the husband has a higher opportunity cost of time or is temporarily absent from the house (on migration), and c) participating women from poor households bring children with them, either to earn an additional wage or because child care is lacking at home." (Webb 1992:109).

Poor households, such as those headed by women, may prefer payment in provisions to cash where purchasing food entails a high transaction cost. They might consider monthly payment as an obstacle to working in public works if daily sustenance is their immediate need. There are of course many other considerations in setting up the remuneration system of a programme (e.g. the objective of the programme, official minimum wage, market wage, food supply, whether markets are poorly connected or not) and local conditions would dictate the form of wage to be adopted.

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21 The case of Mbeya and Tanga roads projects was cited earlier. The participation of women with more income earning options increased when wages were increased.

22 Based on a survey of selected public works programmes in Niger, Webb (1992:101) observed that a majority (97 per cent) of sample households in the high participation group expressed a preference for a pure food wage, or a mixture of part food/part cash. This was related to the opportunity costs of time. Food is delivered locally but the receipt of cash necessitates transportation to and from the market and time necessary for price negotiations.

23 Correze (1989:18) and Mukatagare (1989:74) observed in Gitarama that the economic need of women interested in paid work, principally women heads of households or women whose husbands did not ensure maintenance of the family, was immediate and therefore they preferred to work as casual workers on someone else’s farm which paid at the end of the day either in cash or in kind.

24 See Miller (1992:82-91) and Webb (1992:101) for a discussion on the issue of remuneration.
In several public works programmes, a portion of total direct employment consisted of ‘self-help’, unpaid labour (Martens 1987:29; Tomoda 1987:47-48; Thordahl 1990:23; Sierra Leone 1988:30-31). The use of ‘self-help’, unpaid work is relevant to women’s access to paid employment. Unfortunately, there are no available data on the magnitude of women’s share of self-help labour, except data given by Jennings on the Makete transport project in Tanzania and by Kjaerby on the Ruvuma roads project. Jennings studied two villages which required adults to contribute self-help labour (one day per week for about four hours). In these villages, women comprised 80 per cent of the self-help workers and no adjustment was made for households with limited number of adults, such as female-headed households (Jennings 1992:34-35). This increased the demands on women’s labour, reducing even their time to work on their own land. The small survey done by Kjaerby (1989:43-44) showed that men contributed the highest number of self-help days. He related this to two factors: only men construct or repair bridges and new tracks involving heavy earth work and removal of trees and bush; and in one district, Islamic tradition barred women from working on the road.

Many countries have a long tradition of self-help action at community level. And several of them (e.g. Tanzania, Nepal) have adopted as a policy the mobilization of unpaid labour as a form of self-help in community development projects such as irrigation and rural roads construction, rehabilitation and maintenance. The self-help approach has been espoused by development organizations and governments in order to strengthen community participation and self-reliance. There is an unresolved debate between projects which use this approach and those which advocate the mobilization of paid labour to strengthen household purchasing power. However, it seems fair and acceptable to mobilize self-help, unpaid labour as long as it is voluntary, the project has been initiated by the workers and the labour contributions are made by potential beneficiaries of the project concerned.

This paper is not concerned with the different sides of the debate on using self-help labour per se. But in the interest of women’s access to paid work, it is important to determine if the poor and women are disproportionately represented in self-help labour. Is there a tendency to channel female labour into self-help and that of male labour into paid work? There is basis to raise this issue bearing in mind that wage work has traditionally been men’s domain. In some societies, physical labour by women may be socially acceptable only in the form of self-help. Backer (1992:8-9, 34-36) observed that this is the case among middle income and/or Tibeto-Burmese households in Nepal and that on the whole women are considered too weak to perform as men do. Yet, according to Backer, Nepalese women have undertaken the task of digging in construction as unpaid, self-help labour. In Zambia, employing women on road construction for wages was novel prior to the project. However, according to party and government officials, women have undertaken road work as part of their self-help projects (Zambia 1989:30-31).

The recruitment strategy adopted by a public works programme itself can aid or inhibit women’s participation. Recruitment procedures which claim to be gender neutral (favouring neither male nor female workers) assume that men and women would respond in the same way. Yet, women are usually not as physically mobile as men, do not frequent administrative centres, and thus are unlikely to obtain information made available only at village or district centres or at construction sites. They cannot rely solely on their husbands or fathers to pass on information because the latter may not be in favour of women taking up paid work or working alongside men in construction. Recruitment that is done on the same day as the start of construction work does not give women the chance to ask prior permission from their husbands or fathers or to re-organize their household tasks. (Mukagatare 1989:65-68; Correze 1989:17; Rwanda 1989:78; Zambia 1989:26-27; Tomoda 1987:43-46; Guichaoua 1987:93)

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25 Tanzania: in the Mt Wa Mbu irrigation project, one day out of six days worked was considered as self-help work; and in the Rukwa water supply project, the village chairman called on villagers to contribute free labour as self-help for certain jobs not covered by the project budget; in the Makete project, self-help labour was mobilized for the construction and rehabilitation of feeder roads, tracks and paths. North Kordofan (Sudan) SPWP: self-help constituted 10-20 per cent of total employment generated. Sierra Leone roads programme: the villagers contributed substantial self-help labour in several construction sites; this action was on their own initiative.

26 Where public resources for basic rural infrastructure at village level are meagre, contributions from the community may be the only way villagers can have access to basic facilities. The problem arises when "self-help" is made compulsory and when it is used for "development projects" that do not benefit those who contribute their labour.


28 These are based on experiences in selected projects in Rwanda, Zambia, Tanzania and Burundi.
In making recruitment more gender sensitive, a programme usually has to deal with local administrative structures and practices, and with local norms and traditions. Two SPWPs demonstrate what can be done. An experiment conducted in two communes of Gitarama (Rwanda) in 1989 addressed an intensive information and recruitment campaign specifically to women for work in an afforestation project. Three hundred women, of which 200 were married, presented themselves for recruitment, a far cry from the usual turnout of women under regular recruitment procedures (Correze 1989:17). The SPWP in Gitarama has since explored measures to make the recruitment process more sensitive to the poor and to women. For years recruitment was undertaken by the bourgmestre who preferred men, those who paid taxes and members of the political party. Because implementation of the programme was in the hands of local authorities the project staff could only give advice and probing but these were ineffective. A study by a sociologist (a national) led to the design and experimentation of a new system in the road construction component in 1992. The bourgmestre initially resisted the idea but eventually could not refuse trying out and finally adopting the new system. The process involves: massive publicity, involving multiple channels of communication, on the recruitment procedures and a clear message that women are welcome; a public meeting at the cellule level during which the people themselves choose the poorest or most needy on the basis of various criteria adopted by the people themselves; and submission of the list by the commune to the commune chief.31

The deliberate steps taken by the project staff of the North Kordofan SPWP to overcome social barriers to the participation of poor women are also worth citing. Although in Darfur (Sudan) it is common for women to engage in construction, in North Kordofan construction work is considered a man’s job. Local technicians and village leaders implementing the SPWP considered construction work inappropriate for women. Moreover, among well-off households to which village leaders (those who have a say in recruitment) belong, manual wage labour for women is socially unacceptable. It was therefore important to talk directly with the women in need of paid work and to give them the choice. By tradition, men were the first to gather in the meeting place, and when women were called, those from rich households came first. Breaking old habits and changing perceptions was a gradual incremental process. The project staff proposed the involvement of women only once the programme activities were well underway, in order to allow both local technical staff and communities time to become familiar with the participatory approach of the programme.30 This idea was not introduced in all the schemes at the same time; a step-by-step approach was adopted: first in school construction in one village, then hafir (rainwater catchment basins) rehabilitation and construction, followed by open well construction.31 The project staff explained that women would do lighter tasks (e.g transport mortar) while men would do heavier tasks (carry stone or climb ladders); that men would descend into the wells while women would prepare the building materials on ground level; that men would excavate hafirs while women would move the soil. Women came and their work was rated positively. By the second season, women were performing tasks never before imagined by the villages. The women who participate in school and hafir construction have become an important communication channel for women’s views and concerns. They are now represented in village sub-committees. (Massink 1991)

The extent of women’s participation in construction work is also related to the degree to which they are able and are allowed to perform different operations involved. The available information shows that women’s work is concentrated in afforestation and tree nurseries as in Rwanda (Correze 1989:15) and Sudan (Thorndahl 1990:15) and headloading of sand, gravel, rocks and water. The distribution of women’s work among tasks is largely related to what is defined as suitable for women and what work is socially acceptable. Nursery work is interpreted as suitable for women not only because it is seen as ‘light’ work but because it requires a lot of care and nurturing skills. Because headloading of water and fuelwood in Africa is traditionally a woman’s job, headloading gravel and sand by women is acceptable both to women and the local community. Moreover, men would not do this task.

Some programmes have made efforts to enable women to perform new, traditionally male, occupations. This has initiated a process of change in what is sometimes accepted as a rigid division of labour between men and women, and has widened the opportunities for women’s employment in

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30 There was resistance at first. The national technical staff forwarded several counter-arguments and the village chiefs were reluctant. Counter-arguments presented: that rural communities view this as a shameful activity for women, that the veil would come in the way of work, that women would slow down the work and increase project costs, that men could not hold meetings with women nor talk to them directly.

31 Hafir construction, which was seen as very hard work, and well-digging were considered by the local community strictly men’s domain.
These experiences highlight three lessons. First, construction jobs that generally correspond with the traditional gender division of labour in agriculture and in the household provide women the best entry point into construction. These jobs are more likely to obtain social acceptability than radically non-traditional ones. Moreover, women already possess the relevant experience and can immediately start working. One should thus maximize women's employment benefits in these jobs but without precluding future entry into new areas. Second, programme implementors and technicians often set limits to women's operations on the basis of their own perceptions and reservations which women themselves do not hold or would readily put aside. One should therefore leave to women the choice of which operation to undertake. Third, social norms concerning the gender division of labour are not as rigid as one might assume. The numbers of women in non-traditional, male-dominated operations are not always impressive. However, it is a fact that there are women in tasks never before imagined and that some projects have made considerable progress, the first step being the most difficult to achieve.

Finally, providing for women's special needs at the work site could make construction work more feasible for women. Some programmes have adopted measures to meet the needs of nursing and pregnant mothers who seek employment in construction. There is no information on the extent to which this has influenced women's participation. But given that women's responsibility for child care has been cited as a factor that hampers women's entry into wage labour, one can suppose that measures that ease this part of women's domestic work help. The 1988 Project Review Mission of the Botswana roads programme put the rationale for such special measures very succinctly. The Mission stated that women's reproductive role should not prejudice their employment opportunities and that a child has the right to be fed irrespective of the work of the mother (Hagen et al. 1988:17-18). It therefore recommended that nursing mothers should be entitled to a total rest period of 35 minutes a day in addition to the lunch break in order to breast feed their babies, without financial prejudice to their earnings.³²

The Zambia feeder roads programme had no formal rules regarding working limitations for pregnant women or rest periods for nursing mothers. But most women workers brought along their babies and/or very young children to the work sites and a few were pregnant. There was at first uncertainty over how to deal with their special needs. Eventually, gang leaders and capitäos were allowed to use their discretion. It became generally accepted that nursing mothers and pregnant women should be assigned lighter tasks and that nursing mothers should be allowed to take periodic breaks to breast feed their babies.³³ The latter however was resented by some workers as a special privilege to women (Zambia 1989:33-34).³⁴

In the Gitarama SPWP, nursing mothers are allowed break periods to feed their babies. In order to avoid resentment from male workers who think that nursing mothers would slow down the work, the roads construction project staff has made it a point to constitute women-only gangs.

4. Infrastructure: How are Women's Needs Met?

4.1 From planning to implementation: a gender perspective

As discussed earlier, the distribution of benefits from assets created by public works depends to a large extent on the gender division of labour and control over resources such as land. Irrigation projects provide the best example. In societies where women and men often cultivate different crops

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³² The project observed a daily time payment system. The recommendation was adopted.

³³ A normal working day was continuous without any mid-morning or lunch break.

³⁴ The 1989 Project Review Mission recommended a formal policy that would assist women without being discriminatory towards the women.
and own or control different units of land, the relevant questions to pose are: whose land and whose crop will benefit from the improved water supply system? is there a shift of land use from one crop to another (often a commercial crop), and in the process, who gains and who loses? Unfortunately, this paper is unable to answer these questions as the available literature suffers from a lack of gender differentiation of potential beneficiaries of irrigation projects and a scarcity of information on the operating phase of public works projects. 35

Land use and tenure rights have a crucial bearing on the distribution of benefits from land development and improvement projects, but are often overlooked in project planning and implementation. Webb (1992:102) cites an example in Niger where women work to recuperate degraded land but men have the long-standing tenure rights that enable them to claim lands not cultivated by their family for three generations once the land has regenerated.

Women's land use rights tend to be less secure than men's, and women often lose access to their land with agricultural modernization. To minimize this risk, the North Kordofan SPWP tackled the issue of land rights before starting its water spreading sub-projects (Thorndahl 1990:14-17). At the onset, these sub-projects were expected to touch the highly sensitive issues of land and water rights because these would significantly upgrade land for cultivation. The North Kordofan SPWP therefore developed internal guidelines (e.g. identifying land tenure and land holders) and decided to take up the matter of women's land rights with the villages. Women both assist on their husband's fields and often cultivate fields of their own. In some villages where land to be irrigated is already being cultivated, those already cultivating it would retain their land rights and would thus profit from the water supply. Promoting women's participation in construction and maintenance was also seen as a way of helping women retain their rights to land covered by the water supply. 36 Policies and customary laws governing land tenure rights are external to the project. Thus, it may not always be possible to protect women's rights within the timeframe of the project.

The case of the Nepal SPWP points to external factors which determine how infrastructure in actual operation benefits women's economic activities. The cultivation and marketing of vegetables as well as small livestock-raising are women's traditional pewa activities whose income they fully control. 37 Income from the cultivation of such crops as paddy, wheat and potato, is controlled by men. The irrigation schemes significantly improved the production of men's crops but, contrary to the project's expectation, resulted only in minimal increase in the cultivation of vegetables. This was attributed to the lack of transportation facilities to markets which is crucial to perishable goods, and to the lack of extension services to assist women in this activity (Backer 1992:26,38).

The experience of the Makete integrated transport project in Tanzania, which aims to reduce time and effort expended to reach basic goods and services, also highlights the importance of external factors. The project conducted a household survey to identify rural transport needs, especially those of women, based on the division of labour within the household. The survey pointed out gender differences - that women performed many tasks, expended more time and transported heavier loads than men. By 1991 however the project had hardly reduced women's burden in transport. The study by Jennings (1992), which was commissioned by the ILO to determine why this was so, showed that women faced numerous constraints (socio-cultural, economic, technical) to their use of transport over and above those faced by men. There was a wide discrepancy in the capacity of households and of their members to invest labour and financial resources in transport-related interventions. Jennings concluded that "addressing rural transport needs, and especially those of poor women, can only be resolved within the context of tackling poverty, and enabling women to meet their basic needs" (p.9).

Two lessons may be drawn from the Nepal and Makete experiences: (1) other development interventions may be necessary in order to ensure and optimize benefits of public works to target beneficiaries (this would call for integrated and coordinated efforts among different units of government and organizations); and (2) a gender focus at the stage of objective-setting should be maintained at the planning and implementation phases, and this will necessarily involve a gender...
analysis of the factors (social, cultural, economic, political, institutional) affecting the achievement of project objectives.

Finally, the gender specificity of economic activities can have a major impact on the sustainability of assets created by public works. W e b b (1992:98) described the general experience of labour-intensive programmes in Niger: "Many projects train women (the majority participants) in the repair and maintenance of stone terracing or gully bunds. But, it is men who have received little or no training, who typically claim recovered fields for their own farm use. Similarly, men in some areas are involved in planting trees through public works and are trained in judicious long-term coppicing. But, women do most fuel-wood gathering and long-term management plans can easily become ineffective."

4.2 Involving women in decision-making

One way of ensuring that women's needs and interests are taken into account in the choice and design of infrastructure is to involve them in the planning process particularly of publicly supported community works projects. Participation, defined as the active involvement of the local community in identification, decision-making, resource mobilization and maintenance of the infrastructure, is widely accepted as necessary for the success of community works programmes and the sustainability of assets created. The lack of local involvement is one of the most frequently cited causes of project failure. M ost project documents include explicit reference to the need for grassroots participation but few manage to achieve it in practice (Webb 1992:94).

In many programmes, participation by the local community has been translated into consultation, negotiation and collaboration with local administrative or leadership structures (e.g. the commune or village chiefs, the bourgmestre, the village or district councils, etc.). This already represents a big leap forward in many countries where infrastructure projects have traditionally been decided and implemented unilaterally by national (central) or regional agencies and politicians. Moreover, the support of the local leadership is critical to the smooth implementation of a project. The problem with limiting the scope of participation to local administrative or leadership structures arises when the rich or well-off dominate these structures. The risk that the views and interests of the poor and underprivileged are not represented is great. It is even rarer for women, except perhaps those related to local chiefs, to occupy positions of influence. For example in the M to wa M bu and R u kwa projects in Tanzania, decision-making and planning were done solely by technicians and village councils. The latter were wholly composed of men or dominated by them. Women's role as a result was nil (Tomoda 1987:41; M artens 1987:37-43).

M ost programmes set up beneficiaries' or users' committees (e.g. of small irrigation schemes, water wells) or project committees. A gain, representation in such committees often reflects the local, traditional political and economic power elite and thus almost always excludes women. However, such committees can be vehicles for introducing women's participation in decision-making. Ensuring women's participation requires more than putting women in committees. The experiences in S i e r r a L e o n e, R w a n d a, R e p u b l i c of Guinea and Sudan highlight some of the factors which affect women's participation.

The S i e r r a L e o n e wells construction project set up local committees which served as the village interlocutors in the project. A committee generally consisted of five people elected by the villagers and represented the "nobility" of the village (i.e. people close or related to the village chief). F ollo wing negotiations and promotional action by the project, two out of five members of each wells committee were women. While this was a progress, women are still under-represented considering that women are the major direct users of wells. But constituting the majority of committee members would not have guaranteed women's effective participation; most women representatives were silent members. T his was not surprising in a society where few women held public positions and where women naturally looked to men as their spokespersons. The 1988 Evaluation Mission noted that social mobilization of the women was necessary to prepare them as active participants. T his would have required experienced personnel in the field - something the project did not have. 38 (S i e r r a L e o n e 1988:44-46, 99-100)

38 The project depended largely on the support of local level institutions such as committees at the village, section and chiefdom levels, and religious and traditional social institutions (i.e. secret societies or traditional schools for women and men). In agreement with social tradition, the project manager communicated first with village chiefs and motivated them for the project. The chiefs together with the Social Welfare Officer and project engineers facilitated the recruitment of labourers. The 1986 Evaluation had already observed the low level of participation of women and underprivileged groups.
For the first set of sub-projects of the North Kordofan SPWP, women were not at all involved in the village development committees with whom the project staff coordinated construction activities. But by 1990 following promotional work by the SPWP staff, women had taken part in school and dispensary committees and in water committees (covering hafirs, dikes and open wells). They will also participate in future maintenance committees. Their performance and interest in actual construction showed to the community, especially the men, that they can make valuable contributions in infrastructure construction. In turn, their membership in the committees during the construction phase helped channel part of the direct employment opportunities to women and will help ensure their participation in the future maintenance, management and benefits of the infrastructures created. The North Kordofan experience underscores the importance of women's participation in actual construction as a base for and as an entry point into participation in decision-making. The deliberate efforts taken by the project staff to talk directly with the poor women who, otherwise, would not have attended the village consultative meetings were also critical (Thordahl 1990:17; Massink 1991:9).

At the start of the Rwanda SPWP in the late 1970s, sub-projects were conceived without taking into account the priorities of the communes, provoking misunderstandings, stoppage of work, and sabotage (e.g. cattle grazing in afforested areas). The programme continues to take the initiative but dialogues with the communes have intensified. The modality of popular participation differs according to the subject of decision-making. The participation by women, however, remains weak and limited to working in the construction sites. This has been attributed primarily to the inadequacy of information and, to a lesser degree, to the nature of work, the time availability of women and socioeconomic constraints. On the whole, participation by the population has been linked to two main factors: motivation and direct interest in the infrastructure to be created; and social organization which allows groups of people to accomplish things they could not do individually. The latter would require sensitization activities, training and support for groups (Rwanda 1989:62-65; Gabriella et al. 1990:13-14).

The role of grassroots organizations in facilitating women's participation is demonstrated by the Burkina Faso and Rwanda SPWPs. Two of the villages covered by the Burkina Faso SPWP registered a high participation rate among women due, among other things, to the presence of small women's associations. Prior to the SPWP, these groups had undertaken collective developmental and income-generating activities and maintained common funds. From the start of the SPWP, the women incorporated the infrastructure work among their group activities. The presence of such a social structure at grassroots level enabled the women to take interest in the programme and to optimize the employment opportunities it offered. Women within a group took turns in construction work, and contributed a portion of their earnings to a fund earmarked for a common purpose (e.g. motorized mill, means of transportation to collect water and firewood) (Van den Oever-Pereira 1984:55-58).

Likewise, the active and voluntary participation by villagers in Gitarama in the construction of terraces on their farms was also mobilized through the spontaneous formation of groups. But as demonstrated by the Republic of Guinea SPWP, the effectiveness of women's organizations may be affected by other factors.

Neither the adoption of a participatory approach nor the presence of intermediary organizations to mobilize and represent women automatically leads to the participation of women. This was demonstrated during the 12-month test phase of the Republic of Guinea SPWP (Republic of Guinea 1990:28,90-91). The programme adopted the concept of community contract. Briefly, it is an agreement to build or improve an infrastructure entered into by the local administration and a grassroots organization or a specific sector of the community as the beneficiary of the infrastructure. The community and government, enhancing further popular participation. (see Majeres and Garnier 1992:70-71; Kuiper 1991)
and active than the great majority of the men’s associations. The latter’s close ties with the political and social elite of the village may have given the men undue advantage, necessitating other measures to enable women have a fair share of the programme’s benefits. Moreover, it is quite likely that the six women’s associations were also formed by women close to the village elite. In view of this initial experience, the pilot phase of the project will integrate measures aimed at increasing women’s participation, including improving their access to information on the project and using geographical poverty criteria (villages) combined with social targeting.

5. Conclusions: Does the Public Works Strategy Benefit Women?
The paper focused much of its analysis on the factors affecting women’s participation during the construction phase of public works programmes. Given the lack of gender specificity of available information on potential beneficiaries of infrastructure and the scarcity of information on the operating phase of public works programmes, the paper was unable to look into future benefits accruing to women as a result of the assets created by public works. However, it identified some of the factors which determine the distribution of future benefits from assets created and addressed the issue of women’s participation in the choice and planning of assets to be created.

There is no doubt about the potential of public works to provide women direct income benefits through employment. The experiences of various public works programmes highlight two major points. First, women appreciate opportunities for wage employment and seek work outside the home in order to meet their financial obligations in the household, to augment household income or to ensure their household’s food security and daily subsistence. This is borne out by the fact that the proportion of women among workers during the construction phase tends to increase over the course of programme implementation, and that their numbers increase when programmes adopt measures that ease their entry into paid construction work. Second, public works programmes serve as a safety net for the poor and many of the poor are women. Poor households - those with less income earning options - tend to have the highest and longest participation in public works, and workers from poor households tend to be women. This is borne out by the substantial share of women workers from poor households and by the fact that the bulk of women’s earnings from public works goes to subsistence requirements.

The impact of public works programmes can go beyond employment and income. While not aiming (and these could not by themselves) to radically change the configuration of gender relations and the gender division of labour in a society, public works programmes have the potential for promoting gender equality. By means of their strategies and interventions, some programmes have initiated positive experiences that could aid the process. Wherever programmes have enabled women to engage in construction work for wages for the first time (e.g. North Kordofan, Ruyigi) and to perform jobs and skills hitherto considered as men’s domain (e.g. Botswana), new areas for employment and income-generation have opened up for women. Women’s sources of personal incomes are often limited to traditional activities (e.g. local beer-brewing, handicrafts-making, sale of produce from personal farm, small livestock-raising) while men have access to new and expanding wage opportunities. The entry of women into new skill areas (e.g. construction technical officers, rehabilitation of school buildings) contribute to the development of new perceptions about women’s potential and capabilities as well as to the building up of women’s own self-confidence. Wherever programmes have been able to employ women for wages whereas before they would have been mobilized only for ‘voluntary, unpaid’ work on construction (e.g. Zambia, Nepal), the value - including a monetary one - of women’s time and labour is being recognized and promoted. Parity between men and women with respect to wage rates, wherever this has succeeded, further strengthens this thinking and places women’s labour at the same level as men’s. Wherever programmes are improving the productive resources available to women (e.g. land terraces on women’s farms in Gitarama, irrigation for women’s farms in North Kordofan) in the same way that they are improving those used or owned by men, women’s economic activities are made more easy to accomplish, more remunerative and productive. Their own income streams are secured.

The women’s associations had been formed from traditional forms of organization, sometimes with the same members and operational rules and undertaking similar activities such as collective savings, credit and mutual help. Men’s associations had no relation to traditional organizations. Most were organized by one or more men of high social stature such as the chief of the village, quarter or clan. Note also that the project had formally identified women as a target group.

The procedures for identifying villages and groups, and selecting micro-projects to be assisted used established information channels (which also involved personal contacts between leaders of the prefectures and those of the villages). This led to the concentration of interventions in the administrative centers and among those who were better off and better informed (Republic of Guinea 1990:20-21). Additional measures to be adopted may include review/revision of process of application and approval of micro-projects and technical assistance to women’s associations in identifying feasible schemes.
For poor women, a say in decisions concerning resources that affect their life and work is often the most difficult to achieve. Even where they may have physical representation, they may be ineffective and unheard, inarticulate and reticent. Some programmes are making progress though, with women's representation germinating in the form of village meetings, users' committees and village committees. Most of these local participatory mechanisms are still weak from women's stand point. Yet, one must credit the direction taken by these programmes and the local experience that is being built.

The extent to which the public works strategy is able to provide women direct employment benefits depends on a host of factors. The demands on women's labour within the household (including own-account farming), as well as norms and perceptions that structure woman's work to be in the home, are major constraints to women's entry into paid construction work. However, increasing numbers of women have managed these demands on their time and, where they are given the choice, put aside social reservations against women's entry into paid work and construction, in order to obtain employment in public works. The need for income has been an important, if not the primary, factor in pushing women into public works. But this factor should be seen in a wider context. The choice and the actual entry into public works employment are a function of the perceived gains (to the woman and her household) from devoting time to public works versus the costs of foregoing certain domestic tasks, of foregoing farming activities, of hiring labour to take over her tasks, of undertaking other non-farm remunerative activities, or even of the social stigma that may be associated with paid construction work. The issue of gains and costs is related to the economic need (income or poverty level) of women and their households, to the income offered by public works projects and to alternative sources of income which women and their households have access to.

Many of these factors lie outside the direct and immediate control of public works programmes. But the country experiences demonstrate that the strategies and operational modalities adopted by a programme could aid or hamper women's participation as construction workers and as future beneficiaries of assets created by public works. Social barriers to women's entry into paid construction work are not necessarily insurmountable given. Some programmes have shown that it is possible to overcome social barriers including those involving local attitudes, practices and institutions. This paper pointed to the following dimensions of public works programmes which could aid or hamper women's participation during the construction phase: level and mode of payment; use of self-help, unpaid labour; system of recruitment and mobilization of local labour; division of labour between men and women in construction; conditions of work at the work site; and women's involvement in decision-making and planning mechanisms.

Women's benefits from future assets created by public works depend to a great extent on the gender division of labour and control over resources such as land. Of crucial importance are land use and tenure rights. While policies and practices concerning land use and land tenure are external to public works programmes, a few programmes have demonstrated that there is space within which to adopt measures that ensure women's benefits from land development works. There are external factors though that would require coordinated interventions outside of public works programmes. One important way of ensuring that women's interests figure in the choice of infrastructure is to involve them in participatory planning mechanisms of public works programmes. Community participation is often the most difficult aspect of programme management, and women's representation is often the weakest.

Public works programmes are generally meant to address the needs of a particular area or sector, men and women. Ironically, this gender neutrality often comes in the way of reaching women. Gender neutrality works against women when it assumes that women and men are similarly situated and would respond to a programme's strategies in the same way. This paper has presented many examples that prove this assumption to be false. Gender differences with respect to the allocation of labour in domestic work and production and with respect to control and management of resources have a crucial bearing on women's access to direct employment benefits and to future benefits from infrastructure. Unfortunately, these are often overlooked in programme design, planning and implementation.

Are 'special' efforts necessary to get women on board in infrastructure programmes and to make sure that they do not fall through the cracks? The experiences of the programmes across different regions and countries point out clearly that there is the need for distinct strategies and activities to reach poor women. Measures which have been undertaken as well as proposed to reach and mobilize poor women cover a wide range. Perhaps the most simple (though not necessarily easiest) is massive information dissemination using multiple channels of communication to ensure that women know that
they can apply for construction jobs, submit proposals for infrastructure, and so on. Other measures involving more financial, manpower and management resources are: a) sensitization of national and local leaders and technical staff to women's interests; and negotiations and consultations with them to experiment and adopt measures appropriate to women; b) social mobilization of poor women to encourage their participation in construction, beneficiaries' or users' committees and village meetings through the help of organizers, community facilitators or specialists in women's activities, or through the strengthening of women's associations as intermediary institutions; c) development and experimentation of alternative programme strategies and operational modalities regarding recruitment, training, planning, the participatory process and the conditions of women's work in construction; and d) studies on women's participation and benefits to aid programme planning.

Is there a place for these 'special' efforts in a mainstream programme? Should an infrastructure programme undertake activities which are not within the realm of infrastructure-building? First of all, programmes that turn out to be biased in favour of men, or the better-off, the more influential and the literate because their strategies suit only these sectors of the population fail to be mainstream programmes. There exists no choice but to design programme interventions and strategies according to the reality on the ground. That reality involves the issue of gender. Second, a labour- and local-resource-intensive public works programme is not simply in the business of building infrastructure. Its objective is also to alleviate poverty of specific disadvantaged sectors or areas. That calls for more than simply designing and constructing technically sound infrastructure.

It is clear that the labour-intensive public works strategy has direct income transfer benefits and that it can minimize households' risks of consumption shortfalls. But it is also clear that in order to reach poor women, and the poor in general, the strategy requires many inputs (not all of which are material) and a gender perspective that does not end at objective-setting but runs through planning and implementation.
Brief Description of Programmes and Projects

Botswana: LG - 34 District Roads Labour Intensive Improvement and Maintenance Programme

Began as a pilot project in 1980-1983: established in all nine districts of the country; financial assistance by NORAD and technical assistance by the ILO and NORAD. Objectives: strengthened capacity at district level to improve earth and gravel roads in the rural areas; and a satisfactory and permanent maintenance system using labour-intensive methods.

Burkina Faso: Special Public Works Programme (Pilot Phase)

Implemented from June 1981 to 1986; funded by the Netherlands and UNDP. Covered 31 villages. Immediate objectives: use of created infrastructures by population concerned particularly by target group; increase in employment opportunities by the workers during construction as a result of skills acquired; replication by the government based on experience acquired. Infrastructures included water wells, cereal banks, tree nurseries, anti-erosion works, afforestation, small dams, roads and educational and health centres.

Burundi: Special Public Works Programme

Located in the provinces of Ruyigi and Muramvya. Began in 1979 in seven communes of Muramvya. External financial assistance provided by Denmark, Germany, the Netherlands and Belgium (which financed associate experts). Objectives: employment creation and income generation in order to help ameliorate problems of rural unemployment and poverty; creation and maintenance of rural infrastructures in order to improve living conditions and reduce environmental degradation. Three main components: in agriculture - afforestation, anti-erosion, fertilization, etc.; physical and social infrastructures - roads and paths, schools and health centres, drinking water supply, maintenance of grinding mills, etc.; complementary activities to work sites - construction of offices and stores, equipment of mechanical workshops, etc.

India: Promotion of Income and Employment Opportunities for the Rural Poor - Tamil Nadu (Pilot Project)

Located in Thally Block, Denkanikotta Taluk in Dharmapuri District. Funded by DANIDA. Began in September 1987; due for completion in June 1993. Objectives: district-level capacity to design and implement target-oriented programmes; effective functioning and utilization of infrastructures, skills and newly created assets. Project components: a) enhancement of the collective economic strength of tribal groups, women and landless persons through the granting of legal titles to land and formation of pre-cooperatives and by enabling them to assume responsibility for the maintenance and management of common assets such as irrigation structures, wells and woodlot; b) control of soil erosion through creation of mini-watershed areas, terracing, etc.; and c) introduction of mulberry trees and silkworm rearing in dryland areas owned by small and marginal farmers, rehabilitation of irrigation structures and forestry areas, and creation of cooperative societies for the production and marketing of bamboo articles and rope.

India: Special Public Works Programme - West Bengal

Located in Bundwan Block, Purulia District; financial assistance provided by DANIDA. First phase implemented in 1980-1985 and second phase, 1985-1990. Objectives: amelioration of conditions characterized by periodic drought, low level of economic activity based on monocrop cultivation, lack of adequate infrastructures, and underemployment and unemployment. Implemented schemes under five components (i.e. irrigation, afforestation, animal husbandry, training-cum-production centres and village access roads) during phase I. New schemes were introduced in phase II but major thrust was on the creation of irrigation sources.

Nepal: Special Public Works Programme (Irrigation)

Covers several projects in different areas of the country. Pilot/demonstration phase was implemented in 1980-1987 which constructed and rehabilitated 142 small and medium scale hill irrigation schemes (i.e. Terrace Irrigation Project, Hill Irrigation Programme, Far West Rehabilitation Project and Sindhuli District Infrastructure Rehabilitation Project). In the second phase, the Dhaulagiri Irrigation Development Project (funded by DANIDA) sought to respond specifically to recommendations of earlier evaluation mission to promote the participation of women in village decision-making and development activities. Third phase began in July 1991 and funded by UNDP;
focuses on capacity building of the Irrigation Department. Assistance is limited to training of trainers in users' participation, adaptation of designs, application of simple labour-based methods through community organizers, and the self-sustainable operation and maintenance of small and medium scale irrigation schemes.

Republic of Guinea: Special Public Works Programme (Pilot Phase)
Began in June 1989 in the prefectures of Dabola and Dinguiraye and ended in 1990; funded by UNDP. Second phase began in 1991. Immediate objectives of pilot phase: establishment of a permanent structure responsible for facilitating and establishing labour-intensive works in regular infrastructure programmes; creation of durable sources of employment and income, and capacities for production and agricultural commercialization; enabling local population to participate in selection, execution and maintenance of infrastructures; transfer of skills to local project management and workers; enhancement of capacity of local administration and national personnel.

Rwanda: Special Public Works Programme - Prefecture of Gitarama
Began in 1980 as a pilot project in several areas of the country. In the second phase (1983-86), activities consolidated in Gitarama; eventually expanded to cover prefecture of Ruhengeri. External funding given by the Netherlands, Austria, Italy, UNDP, OCSD and SNV. Immediate objectives: employment creation and income generation in order to help reduce unemployment and poverty; establishment and maintenance of rural infrastructure in order to improve living conditions and reduce environmental degradation. Three main components: agricultural infrastructure covering afforestation, maintenance and management of existing forest areas, anti-erosion through terracing; communication infrastructure covering access roads; ‘terre cuite’ covering training of artisans in brick-making and the like and the installation of better ovens.

Sierra Leone: Labour-Intensive Rural Works Programme
A multi-sectoral rural infrastructure creation programme in Kambia and Bonthe Districts. Began in 1983. Principal donors were DANIDA, UNDP, the Government of Italy and the World Food Programme; has also received UN Volunteers and associate experts financed by the Governments of Belgium, Finland and the Netherlands. Objectives: creation of short-term employment during works implementation and direct impact of infrastructure; and institutional capacity at local and national levels to sustain and replicate labour-based works.

Sudan: Special Public Works Programme - North Kordofan Province
Began in August 1988. Covers the rural councils of EI Obeid District and the rural council of Tayiba. External financial assistance provided by the Government of Italy, UNDP and USAID. Immediate objectives: capacity at local community level to plan, design, implement and manage a SPWP and increased living standards of target populations through provision of basic economic and social infrastructures and additional employment opportunities. Infrastructures created and envisaged: drinking water supply, water harvesting structures, forest nurseries, shelter belts, wind breaks and sand dune stabilization, schools and veterinary centres.
Tanzania: Mto wa Mbu Irrigation and Flood Control Project
Implemented in the M to W a M bu valley of Arusha region in 1980-1988. Involved the building of two flood control drains, rehabilitation of old canals and construction of new ones in order to prevent recurring flood damage and expand cultivable and irrigable land. Funding obtained through Tanzania SPWP launched in 1979 which was supported by multi-bilateral donors like DANIDA, the Netherlands, Germany, EEC and WFP.

Tanzania: Rukwa Water Supply Project
Implemented in Rukwa region from November 1979 to 1988; aimed to supply safe water to 11 villages in the area. Funding from the Tanzania SPWP.

Tanzania: Ruvuma Labour-Intensive Road Improvement Project
Part of the Tanzania SPWP; implemented in 1980-1984. Improved roads were expected to lead to higher agricultural production (by 10 per cent in maize, cashew nuts, tobacco), stimulate trade between the villages and enable people to obtain essential services (e.g. health).

Tanzania: Makete Integrated Rural Transport Project
Located in Makete District; funded by Swiss Development Corporation; began in December 1985; is in its third phase. Objective: reduction of transport time and effort to reach basic goods and services by improving roads and pathways, introducing low-cost means of transport and rehabilitating grinding mills. Third phase focuses on consolidation of project impact and development of skills of District Council.

Zambia: Labour-Based Feeder Road Project - Northern Province
Began in October 1987; funded by NORAD. First phase ended in 1989 and covered six of nine districts in the province. Focused on the development of alternative labour-based systems within the organizational framework of the District Councils which are responsible for rural district, rural and branch roads. The latter relies largely on equipment which it lacks, and possesses limited resources and a weak institutional structure. Immediate objectives: demonstration that labour-based methods could produce high quality roads efficiently and cheaply; an organization within participating District Councils that is capable of efficiently applying labour-based techniques for road rehabilitation and maintenance.
References

Botswana

Burundi

Burkina Faso
Séminaire National sur la Place des Projets à Haute Inténsité de Main-d’Oeuvre dans le Processus de Développement, Bobo-Dioulasso (10-14 avril 1989, ILO, Geneva).

India

Nepal

Republic of Guinea
Rwanda


Sierra Leone

Sudan


Tanzania


Els Kinkert: Women as Road Makers. The Role of Women in the Labour-Intensive Road Improvement Project in the Ruuvuma Region, Tanzania (Agricultural University, Wageningen, The Netherlands, 1983).


Zambia
Project Review of the NORAD Financed ZAM 026 Labour-Based Feeder Road Project, Northern Province - Zambia (Prepared for the Provincial Planning Unit - Northern Province, Zambia and NORAD, 1989).

Mabel C. Milimo and Robina Mulenga: Female Labour Based Improvement and Maintenance of District Roads in Northern Province, Zambia (A report commissioned and sponsored by NORAD, n.d.).

General References


