

**LABOUR-INTENSIVE PUBLIC WORKS IN CHAD:
OVERVIEW OF EXPERIENCES AND
CASE STUDY OF ‘N’DJAMENA NADIF’**



Photo: IDS/BERDES field research team

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Acronyms and abbreviations

AFD	French Development Agency (<i>Agence française de développement</i>)
AfDB	African Development Bank
ATETIP	Chadian Agency for the Implementation of Public Works (<i>Agence tchadienne d'exécution des travaux d'intérêts publics</i>)
BERDES	Bureau for Economic and Social Research and Study (<i>Bureau d'études et de recherche pour le développement économique et social</i>)
CFA	African Financial Community (<i>Communauté Financière Africaine</i>)
CfWTEP	Cash for Work Temporary Employment Project
ECD	Early Childhood Development
ECOSIT	National Household Consumption and Informal Sector Survey (<i>Enquête sur la consommation des ménages et le secteur informel au Tchad</i>)
EPWP	Expanded Public Works Programme
EU	European Union
FAO	Food and Agricultural Organisation (UN)
GIZ	German Development Agency (<i>Deutsche Gesellschaft für Internationale Zusammenarbeit</i>)
IDS	Institute of Development Studies
IDPs	Internally Displaced Persons
IFAD	International Fund for Agricultural Development
IGA	Income-Generating Activities
ILO	International Labour Organisation (UN)
KfW	<i>Kreditanstalt für Wiederaufbau</i>
MICS	Multiple Indicator Cluster Survey
NEPAD	New Economic Partnership for African Development
NREGA	National Rural Employment Guarantee Act
PADER-G	Rural Development Support Programme-Guéra (<i>Programme d'appui au développement rural dans le Guéra</i>)
PARSAT	Programme to Improve the Resilience of Agricultural Systems in Chad (<i>Projet d'amélioration de la résilience des systèmes agricoles au Tchad</i>)
PEL	Labour Emergency Programme (<i>Programa de Emergencia Laboral</i>)
PNEFP	National Employment and Professional Training Policy (<i>Politique nationale de l'emploi et de la formation professionnelle</i>)
PND	National Development Plan (<i>Plan national de développement</i>)
PRESIBALT	Programme for Rehabilitation and Reinforcement of the Resilience of Lake Chad Basin (<i>Programme de réhabilitation et de renforcement de la résilience des systèmes socio-écologiques du bassin du lac Tchad</i>)
SNPS	National Social Protection Strategy (<i>Stratégie Nationale de Protection Sociale</i>)
UNDP	United Nations Development Programme
UNICEF	United Nations Fund for Children
USD	United States Dollar
WB	World Bank
WFP	World Food Programme
YES	Youth, Employment, Skills

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1. Introduction and context

1.1 Poverty reduction and the National Social Protection Strategy (SNPS)

Over the past ten years, Chad has experienced a period of sustained political stability, economic growth, infrastructure development and poverty reduction, with heightened attention to the reinforcement of basic social services and growing investment in productive sectors. Between 2003 and 2011, the poverty rate dropped by 8 percentage points, from 55% to 47%. Nevertheless, as the National Development Plan (NDP) for the period 2013-2015 underlines, economic growth has not been inclusive: certain groups and regions have benefited more than others, and significant disparities remain in most indicators of socioeconomic well-being.

Multi-dimensional poverty remains widespread in both urban and rural zones and the inter-generational transmission of poverty continues to threaten both individual and societal progress. Formal employment opportunities are limited, overall productivity is low, and coverage rates for basic social services such as quality education and healthcare remain uneven. The multiple and complex challenges to social development in Chad from both internal factors linked to issues of governance and institutional instability, and external factors including climatic fluctuations and extremes, armed conflicts in neighbouring countries, and global economic forces.

Poverty reduction, with its corollary the protection and promotion of vulnerable groups, is a central feature of the country's 2030 Vision and the NDP. It is in this sense that the Government adopted the National Social Protection Strategy (SNPS) in July 2015, identified in the NDP as both a cross-cutting strategy and an integral part of its strategic axis 2 aimed at *'the mobilisation and promotion of human capital and the reduction of inequalities, poverty and social exclusion.'* Social protection is considered a central pillar in the fight against poverty and vulnerability. It plays an important role in reinforcing the resilience of individuals and households in the face of various risks and shocks. It is also a right whose provision manifests the social pact between the state and its citizens, thus reinforcing national cohesion through different measures aimed at equity and inclusion.

The global objective of the SNPS is to establish a complete system of social protection in Chad that will i) furnish social assistance and promote the social inclusion of vulnerable groups; ii) ensure a minimum revenue and decent work for the working age population through the promotion of employment and the expansion of social security; iii) promote food security and nutrition; and iv) facilitate access to basic social services, notably education and health, particularly for the most vulnerable individuals and groups.

1.2 Identification of effective mechanisms for the implementation of the SNPS

UNICEF, working with teams from the UK Institute of Development Studies (IDS) and the local Bureau of Economic and Social Research and Studies (BERDES) has provided technical support to the Government in the development of its national social protection strategy. It now continues to support the Government in identifying and developing appropriate measures and mechanisms for the implementation of the strategy. Among the different types of social protection mechanisms that are available and in use in Chad, the focus for the current body of analytical work is on cash transfers linked to resilience, and labour-intensive public works that aim to provide employment while creating needed infrastructure or services.

Global experience highlights the potential of such mechanisms to strengthen both individual and household resilience in the face of various risks and shocks, to help smooth consumption, and to support investment in human capital development including through the increased use of social services. But it also identifies certain challenges in the design, implementation, and monitoring and evaluation of such

mechanisms, with significant lessons learned on how to make such tools effective mechanisms for social protection.

Technical support provided by UNICEF and offered by the IDS/BERDES team aims therefore, to bring international experience to bear on the analysis, assessment, and operational recommendations for the use of these two mechanisms in Chad. The overall work combines a synthesis of global experiences and lessons learned, a review of the use of such approaches in Chad, and case studies of two selected projects currently underway at the time of the study.

For cash transfers linked to resilience, analysis focuses on programmes implemented by CARE International in the east of the country, in rural communities in Wadi Fira, which seek to both protect the survival needs of vulnerable households and strengthen food security and livelihoods. For labour-intensive public works, the focus is on the urban sanitation programme known as ‘N’Djamena Nadif’ initiated and implemented by the mayor’s office of N’Djamena, which has recruited a cadre of women to work as ‘surface technicians’ in charge of sweeping and cleaning the capitals’ streets and market areas. The current report focuses on this latter initiative and the mechanism of labour-intensive public works.¹

1.3 Study processes and methodology

This study combined an extensive literature review on public works programmes in Chad and globally, with qualitative field investigations in N’Djamena over the period 25 September to 8 October 2015. The methodology for the study was developed in advance and combined key informant interviews, focus group discussions and in-depth individual interviews with women, as well as observations.

Information on experiences with public works in Chad as a whole is drawn from interviews with 15 key informants from different ministerial departments as well as development partner organisations, complemented with a review of available documentation on policies, programmes and plans. A report of these discussions was compiled and submitted to UNICEF in October 2015 (Watson et al. 2015).

Case study field investigations of ‘N’Djamena Nadif’ included 16 key informant interviews (with mayoral staff members, two former mayors, communal officials and others); focus group discussions with 78 women (61 currently working as surface technicians and 17 either former workers or on the waiting list); individual interviews with 6 women (current, former, and non-beneficiaries of the programme); interviews with 8 shopkeepers for observations on the women’s work); and the construction of demographic profiles on 65 women (working as surface technicians in both the streets and the markets). Preliminary notes from field research were compiled and submitted to UNICEF in October 2015 (Watson and Nlan-guer 2015) and the full report was completed in early 2016.

Annex 1 provides a list of key informants encountered over the course of this study, while Annex 2 presents the field study research agenda.

1.4 Aims and organisation of the report

This report first reviews the state of the art knowledge and lessons learned from global experience with labour-intensive public works as a mechanism for social protection (*Chapter 2*). It next analyses the national policy context and provides an overview of experiences in the use of such mechanisms in Chad (*Chapter 3*). It then focuses on the case study of ‘N’Djamena Nadif,’ presenting the key findings from field research in N’Djamena undertaken with the support of UNICEF and the mayor’s office (*Chapter 4*). It concludes with a presentation of operational recommendations for the overall use of labour-intensive public works in Chad, and for the reinforcement and potential extension of the approach by ‘N’Djamena Nadif’. (*Chapter 5*). The overall aim is to provide policy makers and programme planners with pertinent information and analysis that will contribute to their efforts around implementation of the SNPS.

¹ See Watson, Devereux and Abdoulaye (2016) for the parallel report on cash transfers linked to resilience.

2. Global state of the art knowledge and lessons learned from labour-intensive public works ²

2.1 Introduction and overview

Public works programmes have been a prominent component of safety nets and social protection systems for several decades, especially in sub-Saharan Africa and South Asia. Typically, public works programmes offer temporary employment opportunities on community infrastructure activities, such as building or maintaining feeder roads and micro-dams. They have two major objectives. The first is a social protection function of providing cash wages (cash-for-work) or food rations (food-for-work) to poor and food insecure people. The second is to improve infrastructure and create useful assets.

Public works programmes are mainly implemented in rural areas, because infrastructure deficits are usually worse in rural communities than in urban centres, and because public works are often a response to food insecurity or a food crisis. Large-scale projects such as dam construction or road maintenance are usually preferred because these activities can employ large numbers of unskilled people, in contexts where high proportions of local populations are poor or food insecure and in need of social protection.

During the 1960s and 1970s, public works schemes provided employment to millions of food insecure people in countries affected by drought and food crisis. In Botswana, Cape Verde, Ethiopia and India, public works contributed to preventing famines. In non-famine contexts, public works have been used to protect people against seasonal unemployment, such as farming communities where one rainy season provides a single annual harvest but leaves farmers with no work or income for half the year.

2.2 Key challenges in public works programmes

Despite their success, public works programmes are controversial. Challenges are related to the number of workplaces generated, the quality of assets created, the ethics of self-targeting, and gender equity:

- *Job creation or asset creation?* It is sometimes argued that public works projects, by attempting to provide employment and infrastructure at the same time, end up achieving neither objective adequately. Firstly, if social protection is a right, or even if it is needs-based, then it should be accessible to everyone who needs it. But linking the delivery of cash transfers or food aid to public works requires identifying and implementing infrastructure projects that can employ thousands of people. In many cases this is not possible and workplaces are limited, leading to job rationing or job rotation: either not everybody in need receives social protection, or they do not receive enough. Secondly, since employees on public works projects are usually unskilled and receive little or no training, the physical assets created are typically of low quality, and deteriorate rapidly. Either the infrastructure needs to be rebuilt or maintained constantly – for example, public works roads are washed away in the annual rains and need to be rebuilt every year – or the infrastructure becomes unusable because there is no maintenance budget.
- *Is self-targeting ethical?* Wages on public works projects are often set at below the local market wage rate (e.g. for agricultural labour), to ensure that only those who genuinely need support will apply for workplaces, and to minimise the disruption of local labour markets. This has the advantage of being self-targeting, but the disadvantage of providing too little support to people who are in urgent need of food or cash. Furthermore, because public works involves heavy manual labour, workers are expending time and energy, which reduces the net value of the payment they receive. In some cases, participants have expended more kilocalories by working on the public works project than they received in food rations, leaving them worse off in nutritional terms than before.

² This review of experiences from public works programmes draws on several sources, including: Burki 1973; Devereux 2002; Devereux and Solomon 2006; Gentilini 2015; Lal 2010; McCord 2012; Subbarao *et al.* 2013.

Therefore, it has been argued that ‘decent work’ standards should be applied to public works, including paying participants at least the minimum wage.

- *Gender sensitive or gender insensitive?* Most public works activities are hard manual labour. For this reason, they are only accessible to adults with labour capacity: older persons, children, persons with disability and people who are ill or frail cannot participate. The work provided is also often inappropriate for women, so men are more likely to apply. Efforts to make public works more gender-sensitive include reserving lighter activities for women (e.g. head-loading sand or stones at roadworks, rather than digging the ground or breaking stones), identifying specific tasks for women (e.g. running crèche facilities for women with young children at worksites), and introducing gender quotas (e.g. at least 40% or 50% of registered participants should be female).

2.3 Types of public works programmes

Public works divide into two types: labour-intensive and labour-based. Labour-intensive public works – also called ‘employment-based safety nets’ – aim to maximise employment: they employ as many people as the budget allows, by minimising spending on non-labour inputs such as capital equipment and training. Labour-based public works – also called ‘labour-based infrastructure programmes’ – focus on the quality and maintenance of the assets created, as much as on employment creation. For social protection purposes, labour-intensive public works are preferred, because they provide more support to more people.

2.3.1 Public works in urban areas

Public works in urban areas are relatively rare. Since the 1970s, urban public works have been proposed as a mechanism for addressing the problem of urban unemployment, but a recent review of urban safety nets concluded that: *‘public works seem to be overwhelmingly implemented in rural areas’* (Gentilini 2015: 26). One well-known case in point is the National Rural Employment Guarantee Act (NREGA) in India, which offers up to 100 days of paid work each year to all rural households – but not to urban households. *‘In the current economic crisis, there have been some calls in India, with its many workers laid off in urban areas, to implement an urban employment guarantee scheme to complement the NREGA, since the rural sector has been absorbing the shock of urban distress’* (Lal et al. 2010: 19).

One reason for the limited application of public works in urban areas might be that the potential for large-scale infrastructure projects is more limited than in rural areas, so opportunities for large-scale employment creation are similarly limited. For one thing, infrastructure deficits are less – as a general rule, roads, water-points and buildings such as classrooms already exist in towns and cities. Another factor is that urban residents have higher expectations about the quality of infrastructure – gravel roads laid by unskilled manual labourers with no equipment might be good enough in rural communities, but are unacceptable in urban centres, where capital-intensive approaches are preferred.

Another challenge facing urban-based public works is that the wage rate offered might be less appealing to urban residents than to rural residents, where widespread unemployment and limited access to cash means that there is rarely any difficulty in recruiting large numbers of workers even at low wage rates. In Botswana’s Labour-Intensive Rural Public Works Programme, the wage rate was fixed uniformly across the country, at 70% of the lowest minimum statutory wage rate for unskilled formal sector workers. *‘In remote rural villages, this level of payment was higher than local norms and was perceived as relatively generous, and volunteers for work often exceeded the supply of jobs offered. Nearer urban areas, however, this wage was much less attractive, and only the poorest – those who could find no alternative paid work – registered for public works’* (Devereux and Solomon 2006:9)

In Liberia, the Cash for Work Temporary Employment Project (CfWTEP) was introduced to create employment opportunities for women and unemployed youth. In the second phase, renamed the Liberia Youth, Employment, Skills (YES) project, proposed activities that were relevant to urban areas included cleaning and sweeping streets and public spaces (markets, recreational spaces, school-yards); painting public buildings, street walls and cross-walks; clearing culverts and drains and filling potholes. Pregnant women and others with limited labour capacity were to be paid to look after the young children of other

women working on public works activities, for the same wages (Backiny-Yetna *et al.* 2010). Activities such as street cleaning have the advantage of required constant repetition, so they can generate full-time permanent employment opportunities, unlike infrastructure projects that are defined and temporary.

2.3.2 Public works to develop livelihood capacities

A second category of public works activities aims to create livelihood opportunities that will generate future streams of income. These projects tend to be smaller in scale – they employ fewer people – and they require a higher proportion of project budgets to be allocated to training and supervision and capital inputs, but they are intended to achieve more sustainable impacts. One example is Argentina’s Labour Emergency Programme (PEL), which provided temporary employment and vocational training in activities such as bricklaying and carpentry. Another case is food-for-work in Namibia under a Drought Relief Programme in the 1990s, which included a high proportion of income-generating activities (IGA) such as brick-making, vegetable gardens, and community tourism, linked to relevant training inputs. Unfortunately, because of the complexity of these IGA and the high level of inputs and technical support required, only 7% of the targeted beneficiaries were actually reached, and most of these activities collapsed after the six months of project support ended (Devereux 2002).

2.3.3 Public works for service delivery

A third category of public works projects aims at delivering services rather than creating infrastructure or income-generating opportunities. In South Africa, the Expanded Public Works Programme (EPWP) was dominated by Infrastructure Sector projects, which created 94% of workplaces in 2005 at an average of 88 jobs per project. However, there were also Environment and Culture Sector projects that supported community-based natural resource management and sustainable eco-tourism, while Social Sector projects supported people affected by HIV/AIDS, by offering ‘learnerships’ for care-givers in home- or community-based care for people living with HIV/AIDS, and early childhood development (ECD) for orphans. The Social Sector projects were oriented towards services rather than infrastructure creation or maintenance, but they created only 1% of total workplaces in 2005 at an average of only 8 jobs per project (Devereux and Solomon 2006).

2.3 Conclusions

In summation, international experiences with public works have confirmed that they can generate large-scale temporary employment, especially in rural areas on physical infrastructure activities. They do face several challenges, such as the difficulty of generating sufficient workplaces to meet the demand for work by poor and unemployed or underemployed people, the low quality of the infrastructure created by labour-intensive methods with little training or capital inputs, the ethical question of whether setting a low wage for self-targeting purposes is either ethical or efficient, and how to create appropriate work for women.

There is less experience with public works in urban areas, where it is even more challenging to identify large-scale temporary employment projects. In urban contexts, repetitive work such as street-cleaning might be the most suitable option. Also worth considering is public works linked to income generating activities – such as vocational training for trades like carpentry, or establishing kitchen gardens – or the provision of social services – such as home-based care for the sick, or early childhood development.

3. Overview of labour-intensive public works approaches in Chad

This chapter examines the place of labour-intensive public works in selected national policies and reviews available information on experiences with the approach over the years. Information is drawn from interviews with 15 key informants from different ministerial departments as well as development partner organisations and on a review of available documentation. It concludes with an overview of general themes and lessons learned arising from experiences in Chad and identifies issues for consideration in moving forward with such approaches.³

3.1 National policy context

3.1.1 The National Development Plan (PND 2013-2015)

The PND serves as the overarching policy framework for sectoral programmes and investments in Chad. In the first of its four strategic axes, focusing on economic growth, it identifies labour-intensive public works (*activités à haute intensité de main d'œuvre*) as an appropriate method to generate employment opportunities as well as to create necessary socio-economic infrastructure in different parts of the country (MEPCI 2013).

3.1.2 The National Social Protection Strategy (SNPS 2014-18)

The SNPS identifies labour-intensive public works as a key mechanism for social protection within two of its strategic axes (MEPCI 2014).

- In **strategic axis 2 on social security and employment**, the operational objective for employment is to ‘*ensure a minimum revenue for people of working age by promoting employment creation and protection including through specific measures for the most vulnerable groups and individuals.*’ The promotion of labour-intensive public works approaches for vulnerable groups is identified as a priority action at national level, with responsibility attributed to the Directorate of Employment and Professional Training of the Ministry of Civil Service, Labour and Employment and the National Office for Employment Promotion (ONAPE) (Table 9). It is also highlighted as a priority at regional level, with specific mention of its use for urban sanitation, rural road construction, and the preparation of rice cultivation lands which will include promotion of work opportunities for unemployed youth (Table 9). Of the two pilot projects identified for implementation of the SNPS, one is a one-year project to promote urban sanitation in N’Djamena through labour-intensive public works involving women and young people, with the aim of creating opportunities for decent work in line with the National Development Plan (Table 10).
- In **strategic axis 3 on food security and nutrition**, cash-for-work activities are identified as an appropriate social assistance mechanism in localities affected by chronic food insecurity as well as a response to humanitarian assistance needs in the face of transitory food crises and an important mechanism to reinforce the longer-term resilience of vulnerable households in the face of climate change.

3.1.3 The National Employment Policy in Chad (PNEFPT 2014)

The National Employment and Professional Training Policy follows on from an earlier Declaration of National Employment Policy (2002) which included the promotion of labour-intensive public works programme as the first of its strategic priorities. The current policy includes a specific objective aimed at developing labour-intensive public works opportunities, with strategies aimed at promoting this method for the construction of socio-economic infrastructure (schools, health centres, water facilities), including through the provision of financial incentives for economic actors who adopt labour-intensive methods (Ministère de la Fonction Publique, du Travail et de l’Emploi 2014a).

³ Note: Research and discussions for this study took place in 2015 – prior to the initiation of the government’s national social safety net pilot project, supported by the World Bank, which includes a public works component.

The Plan of Action developed to implement the policy details the intention to reinforce the capacity of small and medium enterprises and industries to employ labour-intensive techniques and to produce local materials for the construction of socio-economic infrastructure (100 small and medium enterprises trained per year and accessing credit). A specific labour-intensive infrastructural investment policy is to be developed to cover diverse sectors (agriculture and livestock, building construction, road works); training programmes and support is to be offered to workers engaged in this type of activity in order to better define their status and ensure decent working conditions at all high-intensity labour sites (100 workers trained per year). An estimated 15,200 million CFA francs is the budget foreseen for these activities over the 5-year period. (Ministère de la Fonction Publique, du Travail et de l'Emploi 2014b).

According to a representative of the labour and employment ministry, such an approach would serve two purposes: providing a service/creating a public good and promoting employment which, in the current Chadian context of high unemployment, is critical. Once the national employment policy is officially adopted, the Ministry plans to extend this approach through a programme of employment creation for young people.⁴

3.2 Programmes, projects and partners

A number of programmes and projects recently completed, currently underway, or set to start up include a use of labour-intensive public works as part of overall programme activities. Most of these are supported by development partners, implemented in rural areas and often linked to the creation of environmental infrastructure, waterworks or construction of rural roads. Such programmes often take a rather instrumentalist view and do not always include a specific focus on the social protection elements of intensive public works, other than to note that they will bring employment to 'vulnerable groups'. Moreover, as noted in a recent World Bank inventory of social safety nets in Chad, which identified just three labour-intensive public works programmes, information on these projects is relatively incomplete (lack of information on numbers of participants, level of remuneration, number of days worked) and the projects are not necessarily conceptualized as social safety nets. The review recommends that this approach could be further developed and linked more closely to social protection programmes, noting that labour-intensive public works projects '*well-structured, with well-defined parameters regarding duration of work, adequate amounts attributed to transfers/salary, targeting policies, etc., can act as an important pillar of the National Social Protection Strategy.*' (World Bank 2015).⁵

Drawing on information from the above review and additional documentary research, supplemented with consultations with key stakeholders, the following sections outline the different programmes and projects identified, beginning with an early programme for public works institutional development by the World Bank before moving on to more recent experiences with other plans and programmes.

3.2.1 World Bank

The World Bank set aside USD 17 million for a public works and capacity building project in Chad from 1994-1999, working with the Chadian Agency for the Implementation and Execution of Public works Project (ATETIP). The development objectives of the project were to i) demonstrate the feasibility of labour-intensive construction practices and projects; ii) alleviate poverty, concentrating on the rehabilitation or maintenance of existing infrastructure, in order to generate employment opportunities and additional income for low-skilled manpower in urban areas; iii) test procedures that would enable the public sector to commission such projects to the private sector, particularly the *delegation de maitrise d'ouvrage* (delegated contract management); and (d) to improve, through the execution of the works financed by the project, the skills of workers and the competitiveness of firms.

⁴ Interview with the DG of Labour Administration, Ministry of Civil Service, Labour and Employment.

⁵ The three programmes identified in the review include one in the urban zone (N'Djamena Nadif) and two in rural areas (PRESIBALT, in the Lac region, financed by the African Development Bank; and PARSAT, financed by IFAD in the regions of Guéra and Batha Sud).

The project was also intended to strengthen the implementation of a Municipal Development Project which, however, was never initiated (World Bank 2000).

Sub-projects implemented and completed in 1996 (USD 2,750,000 financed by the project and USD 250,000 financed by the Government) included the construction/rehabilitation of gutters and public latrines, schools, health centres, community centres and government buildings. Over 6,000 person-days of employment were created and there was evidence that the process of physical implementation was producing results, though the completion report notes that it was difficult to assess the quality of these works due to technical and managerial weaknesses within ATETIP. Nevertheless, a technical and financial audit undertaken after the project was suspended was able to identify all the works financed under the project and confirm that their costs had generally been less than with other similar works in Chad (World Bank 2000).

Efforts to involve beneficiaries in the project were initiated with a radio and press campaign about the ATETIP program and a sample survey of beneficiary households to identify priorities. Storm drainage was identified as the highest priority. There was also one round of training for neighborhood sanitation committees and for employees of government agencies. Contacts were also made with NGOs to begin sensitization to operation and maintenance needs, but there was little follow-up on these efforts at community participation after suspension (World Bank 2000).

The project completion report in 2000 concluded that overall objectives were only partly met and thus, there was only a limited demonstration of labour-intensive practices and a limited poverty alleviation impact. The delegated contract management system was tested and some workers' and firms' capacities were improved. But because the project was eventually suspended, these improvements fell short of the targets and their sustainability at the time was considered questionable (World Bank 2000).

3.2.2 International Labour Organisation (ILO)

The ILO supports the government in the development and implementation of its Decent Work Programme (PPTD 2012/13-2015) which aims to promote employment, reinforce social dialogue, and reinforce and extend social protection. Labour-intensive public works are identified as one of the approaches for the development of work opportunities for young people, women and vulnerable groups, including the creation of 'green jobs' related to ecosystem preservation. The programme foresees the development and implementation of a pilot, gender-sensitive public works project whose lessons would serve as the basis for development of a strategy for labour-intensive public works (République du Tchad, OIT 2013).

The programme was elaborated jointly in tripartite fashion by the Ministry of Civil Service, Labour and Employment, trade union representatives, and employers, with the support of the ILO; to establish the basis for implementation, an initial study was foreseen of particular sectors that would be promising settings for labour-intensive approaches (such as construction, road works and the like). Currently, however, according to representatives of the civil service ministry, the programme is still seeking appropriate financing and activities have not yet been implemented.⁶

During the programme period, Chad participated in the ILO-organised sub-regional workshop on labour-intensive public works (February 2014, Yaoundé) whose objectives were to review progress in the utilization of this approach and to explore ways of intensifying efforts. Chad's presentation focused on its modest experience with pilot projects linked to rural road works in Mayo Kebbi, Ouaddai and Wadi Fira. The workshop highlighted the positive impacts of labour-intensive public works on beneficiaries, and recommended increased advocacy with partners and higher budget allocations to reinforce and sustain such approaches within the different sectors that contribute to national poverty reduction efforts.⁷

⁶ Interviews with the DG of Labour Administration, Ministry of Civil Service, Labour and Employment and Directrice of Employment and Professional Training, Ministry of Civil Service

⁷ <http://mcie-tchad.com/actualites/249--xveme-seminaire-regional-sur-le-himo.html>

According to officials at the Ministry of Infrastructure who participated in the workshop, exposure to experiences with labour-intensive approaches in other countries was beneficial and they agree that it provides a promising path-way towards the decent work agenda. While the approach might take longer than other approaches, it is also less costly and has the added benefit of injecting cash into local communities. Currently in Chad, however, while the Ministry employs large numbers of labourers through different companies to work on road maintenance (hence a ‘de facto’ labour-intensive approach), protection of construction works, and water passage clean-up, they have not yet reflected on or promoted the social aspects of such approaches, nor have they established a programme to measure the social impacts over the long term. Earlier activities supported by the Swiss Cooperation were apparently not taken up or appropriated by the ministry.⁸

One of the technical difficulties in the use of labour-intensive approaches for road maintenance is seen to be the scattered nature of settlement patterns in Chad – particularly in the arid regions of the Sahel – which mitigates against the employment of local populations for the maintenance of particular sections. Other constraints identified include a lack of local construction materials at road construction sites, attitudes of local populations that road construction and maintenance is the government’s responsibility, and lack of a specific fund set aside for timely payments. Ministry officials feel it would be useful to set up a special unit to reflect more thoroughly on the use of labour-intensive approaches, including in the national strategy for rural transport which is currently being developed, and hope that key donors for infrastructural development, such as the European Union, will come on board.⁹

3.2.3 World Food Programme (WFP)

The World Food Programme uses ‘food-for-work’ and ‘food-for-assets’ in a number of its programme interventions. Its Protracted Relief and Recovery Operation’ for the period 2012-2013 (WFP 2011), whose budget was later extended through 2014 (WFP 2012), aimed among other things to reduce malnutrition, ensure adequate food consumption, and support and restore the livelihoods of targeted groups and communities through food distribution, food vouchers or cash transfers, depending on the circumstances.

Labour-intensive public works activities were foreseen specifically under the recovery component, where WFP, working with the Ministry of Agriculture, FAO and experienced NGOs would aim at *‘increasing agricultural productivity while reducing vulnerability to weather shocks, including soil conservation, pasture enrichment, fodder reserves, and crop storage and preservation. Examples of activities include construction of erosion control infrastructure (stone walls, dams or filter dikes), water management (using wells or micro-dams) and market gardening. In areas where vulnerable communities endure high food insecurity, activities for community-based asset rehabilitation will be designed in accordance with the farming calendar, the availability of operational partners and the capacities of communities. Activities will complement operations financed by FAO, IFAD and the European Union’* (WFP 2012). Food-for-training activities were also planned for associations of parents, women and community groups involved in management of village granaries.

The geographic focus for the programme as a whole is on food-insecure areas of the Sahel; areas of eastern Chad with large numbers of refugees and internally displaced people; and areas in southern Chad also experiencing large influxes of refugees. The specific component of food-for-work / food-for-assets / and food-for-training targeted 258,000 vulnerable individuals in 2012 and 325,000 in 2013 (representing 12% of the total programme beneficiaries) in the seven priority regions of the Sahelian belt as well as refugees and host populations in the south. The planned implementation period was 4 months a year, based on rainfall and crop calendars. The budget increase expanded programme activities into 2014, with plans for continuation of the food-for-assets components and resilience beyond that time period for *‘the creation of productive assets targeting chronically food-insecure Chadian households,*

⁸ Interviews at the Ministry of Infrastructure with the director general of the agency for road maintenance and the director of roads and rural tracks

⁹ Interviews at the Ministry of Infrastructure with the director general of the agency for road maintenance and the director of roads and rural tracks

and for increasing the level of autonomy of refugee households' working within a partnership framework for these activities with Government, UN and other actors (WFP 2012).

The results can be significant. In just one example – in Biltine – a WFP food-for-work project resulted in the construction of 228,000 metres of stone barriers to stem erosion and promote soil regeneration over 313 hectares of agricultural lands that are farmed by women, who make up 90% of the rain-fed agricultural labour force. An estimated 17,000 beneficiaries from 10 villages received 500 tons of food during the lean period, in compensation for their work on these activities.¹⁰

Nevertheless, an evaluation of the overall programme through 2014 found that compared with the direct emergency response (blanket feeding, nutritional support, etc.), the activities aimed at recovery and resilience (including the food-for-assets and training components) were not fully prioritized, were not always consistent with local development plans, and could have benefited from stronger collaboration with institutions with competence in the domain. Moreover, targeting of beneficiaries for these activities was not always based on a clear knowledge or understanding of their particular livelihoods, vulnerabilities and capacities. Consequently, one of the recommendations was for WFP to clarify its approach to resilience, work more closely with development partners and government on activities in this domain, help build competence, and programme support over a longer time frame (from 2-4 years) beyond the normal short-term annual planning cycle. The box below records some of the specific findings of the evaluation (PAM 2014).

Box 1. Specific findings of the WFP programme evaluation related to Food for Assets

- **Unmet targets:** The programme reached less than 20% of the total planned beneficiaries of food-for-assets and training (90,000 out of 583,000) over the course of two years of implementation (2012 and 2013). This was partly due to delays in approval processes for proposed projects (such as development of fertilizer pits, gardening activities).
- **Limited technical partnerships:** The types of Food for Asset work activities proposed (construction of stone barriers, dikes and dams, pond-dredging, environmental protection) require technical collaboration with specialised agencies such as FAO, private sector companies, NGOs, and competent national government structures; however, few such partnerships were established.
- **Weak sustainability:** Ownership and sustainability of asset creation is compromised by gaps in initial project design, poor quality of infrastructure created, lack of consideration for charges associated with maintenance and upkeep, and limited management training of community groups.
- **Lack of national policy focus:** National policies such as the national food security strategy or the 5-year plan for agricultural development do not mention food-for-assets, hence there are no nationally set out guidelines, strategies, objectives or modalities for such activities. World Food Programme as a development partner only facilitates such activities through provision of food resources, but does not itself define their modalities of implementation.

PAM 2014

The World Bank review of food and coupons for work activities implemented by WFP and its NGO partners in 2014 in Wadi Fira and Guéra notes that the total number of beneficiaries – both workers and their families - is estimated at 100,000 (a significant increase from 33,000 and 57,000 in 2012 and 2013 respectively). Labour-intensive work payments for activities undertaken in the off-season account for some 65% of total costs of road repair activities and up to 90% of total costs for hydro-agricultural improvements. Nevertheless, outcomes are below expectations, and the review points out that the budget for such programmes, aimed at 'resilience', is often reallocated to emergency interventions when the need arises (World Bank 2015). Representatives of WFP in Chad confirm that funding issues remain critical: emergency funding is more readily obtained from major donors than funding for projects such as food-for-work/assets that aim more towards resilience. Nevertheless, WFP is piloting a participatory approach to the development of seasonal livelihood programming to identify the types of priority

¹⁰ <http://fr.wfp.org/histoires/tchad-lutter-erosion-resilience-Biltine>

activities to support, in its efforts to strengthen household resilience to shocks (WFP Chad 2014; Rome 2014).¹¹

3.2.4 Food and Agricultural Organisation (FAO)

FAO, working together with the World Food Programme, used food-for-work in a 2012 project to construct hedges around 59 wadis in the Kanem region in order to protect wadi cultivation from animals and halt desertification. A follow-up project has focused on construction of another 100 km of hedges around 20 wadis, with 2,000 beneficiaries from previous activities, the majority women, pre-selected by FAO for nine days, work each at 2,500 CFA francs per day. Additional work of 3.5 days is set aside for tree-planting and a further 9 days each for watering the plants (FAO 2015). According to the FAO programme coordinator, these activities are part of the larger ‘Green Wall’ Programme that aims to plant 200,000 plants over 3-4 months in an effort to combat desertification in the Chadian Sahel. FAO works in collaboration with WFP for the food or voucher for work activities; FAO itself normally provides other types of transfers in the form of agricultural inputs and sometimes small ruminants. FAO as an organization is currently reflecting on the type of transfers most needed to support resilience in household subsistence strategies.¹²

3.2.5 United Nations Development Programme (UNDP)

UNDP has used the labour-intensive approach in its programme of support for economic development and humanitarian assistance to the commune of Goz Beida in the Sila region in the eastern part of the country. This was set within the overall support provided for decentralization, local governance, and transition and stabilization of regions affected by food insecurity. The main focus of activity was around urban road improvement including construction of appropriate drainage systems to ensure access routes could remain open in all seasons. The approach was chosen in order to provide employment to 200 vulnerable individuals (half of whom were women) selected from among residents of the commune itself as well as from the displaced populations and refugees settled in the area. Identification of participants was conducted by commune authorities, assisted by representatives of the local delegation of Social Action. The project helped strengthen local capacity in such an approach and the mixture of participants served as the basis for advocacy efforts around peaceful coexistence. Total cost was 15,900,000 francs CFA, with funding in part from the Government of Japan (12,720,000 francs CFA) and a contribution from the Commune of Goz Beida (3,180,000 francs CFA).¹³

Remuneration for the labour-intensive work was set at 2,000 CFA francs per day for a period of 10 days and represented a quarter of the overall costs of the programme. The approach was specifically designed to both reduce poverty at local level through the creation of temporary employment as well as to create quality infrastructure and was set within overall efforts to strengthen local governance structures (PNUD 2013). The project coordinator from UNDP, who had gained experience in the use of labour-intensive public works in Burundi, noted that a further aim was to strengthen social cohesion and peaceful co-existence through work place awareness-raising activities for beneficiaries from the IDP, refugee and host communities.¹⁴

3.2.6 International Fund for Agricultural Development (IFAD)

IFAD includes high-intensity labour approaches in its project to improve the resilience of agricultural systems in Chad (PARSAT) (FIDA 2013). With a geographic focus on selected zones of the Sahelian regions of Guéra and Batha and a budget of 31.99 million USD, the project aims to 1) secure production against climate risks by improving water resources and management on agricultural plots; 2) intensify production through improved agricultural techniques and utilisation of adapted mixed varieties; 3) enhance grain storage capacities during the lean periods; and 4) diversify economic activities in the off-

¹¹ Interview with country director and programme officer, food assistance for assets, WFP Chad.

¹² Interview, resilience programme coordinator, FAO.

¹³ <http://www.td.undp.org/content/chad/fr/home/presscenter/articles/2013/10/18/faire-participer-les-populations-vulnerables-a-la-decentralisation-projet-himo.html>

¹⁴ Interview with UNDP governance programme officer.

season and improve market access. With a planned duration of 7 years, the project targets vulnerable rural farming households, including female-headed households and young couples just starting out.

Within the programme's broad-based, integrated approach, intensive labour activities are foreseen under objectives one and four, including improved water retention structures on agricultural plots; and rural road works to improve physical access in the project zone during the rainy season. These activities are to be conducted during the off-season and are conceived as a social safety net to provide income to the most vulnerable households. The programme foresees compliance with modalities for labour-intensive work (cash-for-work/assets) established by WFP and envisages an eventual partnership with that organisation.

Building on earlier work, IFAD has also been implementing the Rural Development Support Programme in Guera (PADER-G) at a total project cost of US\$ 20.1 million over a period from 2010/11-2015/16, with the aim of enhancing food security, mobilizing local savings, and strengthening the capacity of grass-roots producer organisations benefiting a total of 26,000 households - 130,000 persons.¹⁵ Use of labour-intensive approaches, in coordination with WFP, were planned for a number of activities including the rehabilitation of rural roads and dam repair; programme reviews in 2014, however, revealed that these activities had not yet begun (FIDA 2014a).

3.2.7 The Swiss Cooperation

The Swiss Cooperation used labour-intensive approaches extensively in successive programmes of cooperation in the eastern part of Chad (Wadi Fira, Ennedi, and Ouaddai) for the rehabilitation of rural tracks and anti-erosion activities undertaken over a sixteen-year period, from 1996 through to 2010. From 2001, complementary measures to reinforce capacity in rural infrastructural development were added to the programme. In addition to direct action on the ground, the programme aimed to derive lessons learned for the experience for national authorities to take into consideration in the formulation of the national transport strategy (see above). Five principles of action included 1) taking overall environmental conditions into consideration; 2) prioritizing local materials and simple, durable construction techniques; 3) using labour-intensive methods to the extent possible; and 4) building a decentralized local capacity for management and maintenance of the rural tracks and other community assets created. The labour-intensive component (starting with community participation in the conceptualization of activities) was highlighted as a means to 1) foster appropriation of the project since long-term maintenance and management of the rural roads and infrastructures will be their responsibility; 2) create local capacities to continue and extend such approaches; and 3) furnish employment and temporary revenue as well as facilitate the emergence of micro-entrepreneurs qualified in the sector. The types of work suitable for the labour-intensive approach (masonry, anti-erosive measures, rockfills, light refills and surface treatments) were distinguished from tasks demanding mechanized work (heavy refills, sand scouring 'decapage') (Bureau de la Coopération suisse au Tchad 2012).

The retrospective review of activities underscores the importance of capacity development and careful organization of work. Reviewers note that since the traditional organisation of village communities was not fully adapted to the needs of organising construction work, it was important to establish appropriate structures and train participants in both technical and management activities.¹⁶ The project managed activities for the first six years, after which implementation was ceded to a local company formed, composed, in part, by former project personnel working in collaboration with the Regional Delegation of Infrastructures and the Laboratory of Buildings and Public Works. Beneficiary communities were organized in *Groupements de Gestion de l'Entretien des Pistes et des Ouvrages Antiérosifs* for the management of infrastructure (collecting local funds; managing barriers against rainwater; planning

¹⁵ http://operations.ifad.org/web/ifad/operations/country/project/tags/chad/1582/project_overview

¹⁶ 'L'organisation traditionnelle des communautés villageoises n'étant en général pas adaptée aux travaux de construction des pistes et des ouvrages, l'organisation des chantiers était un élément essentiel pour une bonne performance des travaux en HIMO. La hiérarchie sur les chantiers s'est développée selon les compétences techniques, organisationnelles et sociales des ouvriers villageois'.

maintenance work). Regional development programmes, since transformed into NGOs were created as part of the organization structure and Economic Interest Groups (*Groupements d'Intérêts Economiques*) were created and trained on both technical work methods and management in order to take over some of the labour management issues.

Box 2. Assessment of labour-intensive public works activities of the Swiss Cooperation

- Assessment at the end of programme activities found the rural tracks to be of high quality (only 1 out of 36 irreparably damaged after 15 years), while the technical approach allowed for an 80% reduction in erosion.
- The labour-intensive approach, when coupled as needed with mechanized inputs, proved effective and the training component enabled labourers to be re-engaged through successive phases of the programme.
- The specific social protection effects on individual labourers were not fully explored in the review; however, it is clear that the creation of both temporary employment during the course of the programme and the development of local organizations and a capacity for ongoing work responds to a critical need in the region; one participant noted that it helped stem a rural exodus as young people were able to find work during the off-season.
- One drawback noted in the review, was the absence of an effective monitoring, evaluation and documentation component which could have strengthened the advocacy effects of the intervention.
- Recommendations stemming from the review include promoting the use of labour-intensive approaches for both road works and environmental infrastructure in future implementation of the national strategy of rural roads

Swiss Cooperation, 2012

More recent labour-intensive activities supported by the Swiss Cooperation and implemented by GIZ (German Development Agency) attempt to build on lessons learned from the past, focusing in particular on improving food security in the three regions of Wadi Fira, Ennedi, and Batha through the construction of river weirs (*seuils d'épandage*) to increase water retention to replenish the water table and expand gardening in low-lying areas. Local beneficiary communities are organised into work management groups with more systematic training provided than in earlier programmes; local NGOs remain critical partners and local agreements for work processes are more strongly supported; and the daily compensation rate for public works activities has been raised to 2,500 CFA francs per day (from the earlier 1,500) (Coopération Suisse (2015)).¹⁷ According to Swiss Cooperation programme staff, the programme is set to last 9 years, in three phases of three years each. Only the initial construction work is remunerated; maintenance activities thereafter are to be assumed by the community management groups which will create a fund for this out of their daily earnings and from the increased revenue from gardening activities that will accrue from the project activities. Construction of each weir requires some 100 people working one to two months.¹⁸ According to GIZ programme staff, the labour-intensive approach has three aims: 1) local capacity building; 2) monetization of the local economy; and 3) appropriation of construction works by the community. Participation of women is encouraged (for example, carrying mud on their heads).¹⁹

3.2.8 The Kreditanstalt für Wiederaufbau (KfW)

KfW financed a labour-intensive road rehabilitation project in the region of Mayo Kebbi (southwest Chad) between 2003 and 2005 (27 months) (KfW 2009). The overall objective was to reduce rural poverty through provisional labour-intensive roadworks and a durable improvement in transport connections. The programme aimed specifically to meet the transport needs of the local residents through labour-intensive measures. The indicators for measuring programme objective achievement were: (a) all-year-round trafficability on 75% of the final projects after three operating years and (b) a local labour input ratio of at least 25% to building costs.

¹⁷ According to a Swiss Cooperation Programme staff member, the earlier remuneration was much too low, and some villagers refused to participate – preferring to seek other off-farm employment elsewhere, including in the newly discovered gold mines in the north.

¹⁸ Interview with Cooperation Suisse programme manager and agronomist.

¹⁹ Interview with GIZ chief of seed industry project and project staff member.

Key programme measures comprised: (i) the establishment and administration of a decentralised reserve fund to finance labour-intensive repair works requested by village communities, (ii) the professional execution of construction works, largely to remove bottlenecks through the construction of fords, smaller passage structures and ditches and erosion prevention with gabions, dry masonry walls and small stone dams, (iii) consultancy services in the organisation, management, planning, tendering, awarding, invoicing and payment of construction works as well as building supervision, (iv) raising awareness in village communities and their mobilisation for participation in individual projects and (v) training various local actors, such as engineering offices, small-business operators, local animators and village communities for the professional planning, execution, maintenance and supervision of individual projects. Altogether, construction or rehabilitation work was carried out on about 300 km of rural roadways in the target region. Total programme costs amounted to EUR 5.64 million. An ex-post evaluation judged overall performance to be insufficient and concluded that technically similar measures to this road construction programme, which assigned large or full responsibility for the maintenance of even major trans-regional roads with, in some cases, quite technically challenging reinforced fords, to the (poor) local population, may not be feasible.

Box 3. Key findings from the ex-post evaluation of KfW's labour-intensive rural road project

- Expectations that the target population would assume on its own the maintenance and upkeep of the roads once the project funds were finished were unrealistic, as were expectations that the implementing agency (Direction Générale des Routes) would be able to continue work; this brings to the fore issues of sustainability.
- Unrealistic expectations that road works alone would bring about poverty alleviation, in the absence of other development efforts and the declining productivity of the cotton sector, led to a faulty assumption that roads themselves were a development priority that local populations were willing to invest in.
- The proportion of total investment capital to pay wages fell below expectations. Instead of the planned 20%, only 8% was contributed in the form of (partly) paid labour by the local population (a major component of the implementation approach).
- No comparative data is available for assessing the specific costs, operational efficiency and cost-effectiveness of the programme
- While overall poverty reduction objectives could not be measured, temporary and also limited beneficial medium-term income effects were achieved through the implementation of the construction and subsequent maintenance works, but these were not specifically monitored. *'Whether the increased income from local wage labour has been invested in improving the conditions of life for the families cannot be empirically verified, as is the case in almost all development cooperation programmes. Based on general experience from Mayo-Kebbi, we may, however, assume that a significant amount of the wages of the many women employed was (and is) spent on food, health and water supply as well as the school education of the children.'*
- The anticipated economic and social effects of better accessibility of rural areas for poverty reduction and improved conditions of life have not materialised as expected due to the actual small improvements in all-year trafficability and the concurrent deterioration in the economic and political climate.

Source: KfW 2009

3.2.9 The African Development Bank (AfDB)

The ADB is financing a multi-country Programme to Rehabilitate and Strengthen the Resilience of Lake Chad Basin Systems (PRESIBALT). Approved in 2015 for a period of five years, the programme aims to improve incomes, food security and access to social infrastructure for populations living around Lake Chad. Its 3 main components are to 1) preserve and develop water resources; 2) develop ecological services and value chains; and 3) build institutional and programme management capacity. It plans to contribute the enhancement of employment and revenue-generation through labour-intensive works in off-farming periods and predicts that *'the combination of works, vocational training and access to means of production for the poorest (Work-for-assets) will generate additional revenues for the populations estimated at 50% minimum of current revenues, encouraging them to use social services like education and health and strengthen the value of social capital'* (African Development Bank 2014).

3.2.10 New Economic Partnership for African Development (NEPAD)

An earlier *Project to open up access to productive zones in rural areas* was set out in in NEPAD's 2005 programme for the development of African agriculture for Chad (NEPAD 2005). It aimed to contribute to poverty reduction and improved conditions of life for rural populations in the southern part of the country and large parts of the Sahel through – among other things - the development of transport infrastructure and services (construction and maintenance of 1,500 rural tracks). The project was to take a community development approach and use labour-intensive methods for public works whenever possible (*'valoriser la main d'oeuvre locale pour l'exécution des travaux sur les pistes rurales'*). It was specifically noted that *'This approach must counteract the inadequacy of earlier projects or those currently underway that did not sufficiently involve different stakeholders in all phases of development and implementation of activities. It will in this manner ensure the sustainability of projected investments.'*

The advantages of using labour-intensive methods were seen to lie in the redistribution of revenue among the local population and their familiarization with new techniques. The programme document points out, however, that so far, such methods were still in an experimental stage in Chad, with no clear-cut national model to follow. It was cautioned that use of such methods would not be automatic, but would depend on certain conditions including population density, availability of materials, distances to work sites, and agricultural calendars, among other things. It is not clear from the programme document what remuneration was to be given for labour: but the importance of a preparatory phase of awareness-raising (*'sensibilisation'*) aimed at getting communities to consider the tracks as public goods that belong to them was highlighted as a means of ensuring that 'populations invest in the project'. By most indications, it seems that once the tracks were built, upkeep and repair would be up to the communities themselves.²⁰ Follow up documents on programme implementation were not available for review.

3.2.11 Others

The European Union (EU), in its 11th European Development Fund programme for Chad (2014-2020) focuses on three main sectors: food security, nutrition and rural development (67% of the budget); management of natural resources (12%); and governance (15%) for a total of 442 million euros (République du Tchad – Union Européenne). While not mentioned explicitly within the programme document, an EU representative in Chad highlighted the importance of labour-intensive approaches in creating rural infrastructure and improving access to rural markets; from his perspective, such approaches would establish a technical basis and know-how for rural construction at a local level and would provide employment, particularly for young people, hence slowing down the processes of rural-urban migration. *'It is a question of long-term, not short-term, labour-intensive activities,'* he insists, *'with the intent to use these activities to transition into a real labour market and to create assets that the communities need.'*²¹

Other national perspectives on labour-intensive approaches come from the national coordinator of the sustainable information system of food security and early warning, who also serves as permanent secretary of the Action Committee for food security and management of crises. He identifies such approaches as important for food security linked to resilience and favours them over direct cash transfers since they represent a mechanism that goes beyond emergency assistance to promote resilience, particularly through support for off-season agricultural work and rural infrastructure development.²²

²⁰ *'Les actions de sensibilisation doivent amener les populations à s'investir dans le projet d'aménagement. En analysant les investissements à faire, en se prononçant sur la manière de les réaliser et de garantir leur maintenance par la suite, les populations seront amenées à considérer la piste comme un bien leur appartenant et dont le maintien en bon état est indispensable à l'amélioration de leur bien-être et de leur niveau de vie.'*

²¹ Interview, 2nd secretary and chief of rural development and food security section, EU delegation in Chad.

²² Interview, national coordinator, support project to the sustainable information system of food security and early warning and permanent secretary of the action committee for food security and management of crises.

3.3 Lessons learned and conclusions

Chad has an extensive history of labour-intensive public works, going back at least to the 1990s. Numerous agencies have provided financial and technical support to these projects, including the World Bank, World Food Programme, FAO, UNDP, IFAD, Swiss Cooperation and ILO. Early interventions successfully created temporary work opportunities and constructed or rehabilitated infrastructure ranging from roads and gutters to government buildings and public latrines. However, evaluations questioned the sustainability of the works and found limited evidence of poverty alleviation impacts.

In the current policy context, labour-intensive public works are identified as an important policy response to poverty and food insecurity in the National Development Plan and the National Employment Policy as well as in the National Social Protection Strategy, with the objectives of providing income by creating employment opportunities (especially for the youth) while creating or strengthening essential socio-economic infrastructure. Activities such as erosion control are intended to reduce livelihood vulnerability and build resilience against climate stress. Target groups include the rural poor as well as refugees and internally displaced persons (IDPs).

In practice, public works projects in Chad have tended to focus more on the infrastructure objectives and do not always follow sound social protection principles such as targeting those in greatest need, providing gender-appropriate work opportunities for women, and enforcing ‘decent work’ standards. However, the current Plan of Action for the National Employment Policy asserts that decent working conditions will be applied on public works projects, and the ILO is proposing to pilot a gender-sensitive public works project. Experience in Chad also reveals recurrent challenges in terms of generating enough work opportunities to meet the needs, and persistent difficulties in terms of creating sustainable assets, especially in the absence of maintenance budgets.

Moving forward, labour-intensive public works have proven to be a fairly effective policy instrument in Chad, but its effectiveness could be improved both as a social protection intervention. The following three areas should be prioritised:

- focus on generating enough work opportunities to meet the needs – bearing in mind that the ‘employment guarantee’ scheme in India offers 100 days of work as a right to all rural households;
- identify ways of improving the sustainability and usefulness of infrastructure and assets created through public works, such as enhancing the quality of work and including maintenance budgets;
- improve the social protection impacts by ensuring that ‘decent work’ standards are applied on all public works projects in Chad.

4. Case study of the use of labour-intensive public works in ‘N’Djamena Nadif’

This chapter provides an in-depth case study of the ‘N’Djamena Nadif’ initiative of the mayor’s office of N’Djamena which employs women ‘surface technicians’ to clean the streets and markets of the capital in a labour-intensive public works approach that aims at both provision of a public service and reduction of unemployment.

Because of the paucity of written documentation on this initiative, the study is based on field investigations drawing on qualitative research methodologies including key informant interviews, focus group discussions and in-depth individual interviews with women, and observations. Field investigations included 16 key informant interviews (with mayoral staff members, two former mayors, communal officials and others); focus group discussions with 78 women (61 currently working as surface technicians and 17 either former workers or on the waiting list); individual interviews with 6 women (current, former, and non-beneficiaries of the programme); interviews with 8 shopkeepers for observations on the women’s work); and the construction of demographic profiles on 65 women (working as surface technicians in both the streets and the markets).

The chapter opens with an overview of the urban setting including an analysis of the current situation and trends in multi-dimensional poverty in N’Djamena and an examination of the particular vulnerabilities of women.²³ It then outlines the background to and key dimensions of ‘N’Djamena Nadif’ initiative and the role of female ‘surface technicians’ therein before outlining the demographic profile of the women and presenting findings from detailed discussions them with on their experiences and perspectives on the programme. The positive impacts of this work on their lives as well as some of the difficulties and challenges they face are presented in detail, and key issues for further consideration in development of the programme are identified. While the focus is on women surface technicians working under the supervision of the central mayor’s office, an attempt has been made to provide additional information on those now working under the decentralised authority of communal mayors as well.

4.1 Context of N’Djamena: urban growth and multi-dimensional poverty

N’Djamena, capital of Chad, is a sprawling city situated along the meeting point of the Chari and Logone rivers. Its population, projected at around 1 million based on the 2009 census has been growing rapidly at a rate of 5% per annum, fuelled partly by significant rural-urban migration (4 out of 10 inhabitants of the capital were born in other regions). N’Djamena now accounts for nearly a tenth of the total population of Chad, and over a third of its urban dwellers. It is composed of 10 communal boroughs (arrondissements) and 64 neighbourhoods (see map), with the central mayor’s office overseeing administration through communal councils elected for the first time in 2012 (Urbaplan, 2013).

Population growth in the capital has been accompanied by considerable surface expansion – from 7,000 hectares in 1999 to more than 20,000 hectares today (Urbaplan 2013); however, in spite of ambitious urban development activities particularly since the return to calm after the period of conflict from 2004-2008, the city’s infrastructure and services remain largely insufficient for its population’s needs. Only about a third of residents are served by the electricity network and around 80% of residents are still using firewood for cooking (Besse and Alari 2012). Roads, particularly in the peripheral areas, remain rudimentary and due to a lack of proper drainage systems, whole neighbourhoods are subject to flooding during the rainy season, contributing to health problems linked to poor water and sanitation conditions. According to the latest MICS results (2010), only about half (53.7%) of all residents use drinking water from faucets, and just over a quarter (28.5%) have these faucets in their homes, while 60% use improved sanitation facilities. Due to the high cost of imported construction materials, many homes, both in the

²³ Much of the analytical work and information on N’Djamena derives from a study of poverty and vulnerability in Chad conducted for the World Bank (Watson et al. 2015) and reported in World Bank, 2015.

The findings of a recent participatory study of poverty and vulnerability in Chad offer a qualitative look at how poverty is conceptualized and experienced in its different forms (Watson et al. 2015; World Bank 2016). Study respondents in N'Djamena described someone who is poor as 'someone who has nothing', 'who cannot move', who is 'hungry, unhappy, and badly dressed'; 'someone who has no work or resources'; 'someone who cannot take care of his children's health and education.' Urban poverty is linked particularly to high cost of living, which is seen to be a growing problem: 'We see more and more poor people in N'Djamena' said one. 'The price of foodstuffs and particularly lodging has risen over the past 10 years' said another. 'Everything has become more expensive and we also have many relatives to take care of.' The greatest challenges for poor people in N'Djamena, according to respondents in this study, are adequate work and employment, decent lodging, appropriate water and sanitation, access to health and education, and conditions of security. Underlying causes that are identified include 'the will of God', poor governance (wars, state demolition of houses for urban development), economic factors (lack of jobs, the devaluation of the CFA franc; unequal distribution of wealth), environmental shocks (droughts, floods); and lack of education. Individual shocks (deaths in the family, long-term illness, loss of employment) are also seen to contribute to poverty and vulnerability. Certain categories of the population are seen to be particularly vulnerable, including women, and especially those who are widowed or raising children on their own but lack access to adequate means of earning an income.

Statistics from the national employment survey conducted as part of ECOSIT3 in 2011 confirm that employment is a key issue linked to poverty – for Chad as a whole as well as for N'Djamena. Measures of employment in largely informal economies such as Chad are, of course, notoriously difficult: for Chad as a whole, according to the ILO definition, the unemployment rate seems quite low, at 5.7%, and just slightly higher in N'Djamena, at 8.8% (10.4% among women, and 8.1% among men). But combined with global underemployment rates (linked to both the number of working hours/days and the earnings level), the situation is quite different. For Chad as a whole, global underemployment is estimated at 40.8%; in N'Djamena it is 32.1%. For urban areas as a whole, the underemployment rate for women (40.2%) is considerably higher than for men (32.4%). Overall, in urban areas, women make up just 41.5% of all those employed (compared with 55.1% nationally). The box below provides a number of indicators of gender disparity in access to employment, types of employment, and remuneration for urban dwellers.

Box 4. Gender disparities in the urban labour force in Chad

- About equal portions of women (22.8%) and men (19.8%) are engaged in agricultural employment; but women are more likely than men to be engaged in industry (22.3% vs 15.7%) and commerce (34.7% vs 24.2%) while men are more likely than women to be engaged in services (40.4% compared to 20.2%).
- Men are more likely than women to be engaged in the public sector (16.9% vs 6.9%) and in private formal activities (15.6% vs. 5.6%) while women are more likely to be engaged in the informal sector, both agricultural (65.5% vs 48.7%) and non-agricultural (21.9% vs 18.9%).
- Overall, women in urban areas make up just 17.1% of public sector employees and 26.6% of formal private sector employees, but account for nearly half of the informal workers in both agricultural (49.8% women) and non-agricultural (47.9%) activities.
- Men are more likely than women to be working as professionals (cadres) (13.3% vs 5.2%); employees or workers (19.9% vs 5.3%); and labourers (8% vs 2.2%) while women were more likely than men to be independent workers (64.3% vs 42.3%) or family aids/apprentices/or other (23.1% vs 17.5%).
- Overall, women in urban areas make up just 17.4% of cadres (professionals); 21.9% of employees/workers; and 38.6% of independent workers, but nearly half of the labourers (47.7%) and the three quarters (75%) of family aids, apprentices or other
- The monthly income of households headed by men is higher than that of households headed by women: total income of male-headed households (326,629 CFA francs) is roughly 3 times higher than that of female-headed households (108,001 CFA francs / month, but because male-headed households (with an average of 5.6 members) are larger than female-headed households (with an average of 4.7 members), per capita income for male-headed households (54,189 CFA francs per month) is just over double that of female-headed households (25,643 CFA francs per month)

ECOSIT 3 Employment survey results

4.2 Background on ‘N’Djamena Nadif’ and the work of women ‘surface technicians’

‘N’Djamena Nadif’ (Clean N’Djamena) is the name given to a broad-based urban sanitation programme launched by the mayor’s office in 2009 in response to the President’s call to make N’Djamena the ‘showcase city of central Africa.’²⁴ The aims are to improve the living conditions of the city’s residents by establishing an effective garbage collection system as well as a functioning system to clean streets, avenues and public market places, thus creating a healthier environment. Responsibility for the programme was attributed to the cleaning and waste disposal service unit of the mayor’s roadworks and sanitation division which, prior to the decentralisation process, divided the city into three zones of sixty-three sectors, with garbage trucks allotted to each sector for regular pick-up of refuse. Main avenues of the city and certain public institutions were supplied with refuse bins to facilitate regular pick-up; in more inaccessible areas, six transfer centres were established, with primary garbage collection carried out by neighbourhood associations and small- and medium-sized enterprises supervised by the mayor’s cleaning and waste disposal service unit; this unit also contracts with private individuals. Garbage is transported to a landfill facility on the outskirts of the city (Ville de N’Djamena and AFD, nd). After the initial distribution of equipment, the programme has been funded by the mayor’s office, with some support from the French Development Agency (AFD), according to a programme official.

A unique part of ‘N’Djamena Nadif’ has been the recruitment of a large corps of ‘surface technicians’ - primarily women - who are responsible for sweeping the streets and market places. As with ‘N’Djamena Nadif’ as a whole, the impulse for this initiative had political roots in the President’s re-election agenda focusing on ‘the social.’ The mayoress of N’Djamena at the time – the first and only woman mayor - undertook the project from that perspective, as a political authority and member of the ruling party. According to her, the initiative sprang from two observations: 1) there were many destitute women in the city in desperate need of work; and 2) when women work, one sees results. A subsequent mayor, and current governor of N’Djamena, who later took up the initiative with enthusiasm explains the focus on women as follows: ‘*There is no one who appreciates cleanliness more than women, who in any case do all the work of maintaining cleanliness in their own homes.*’ At the time, the First Lady herself was urging action to deal with the large numbers of women on the streets, so from the outset there was a dual objective: to contribute to making N’Djamena the showcase of Central Africa, and to reinforce the President’s social agenda through job creation. Inspiration, according to these former officials and the current sanitation and health director, was drawn from the Burkina Faso model of the ‘Green Brigade’ which a number of city officials had observed in action.

The initiative was launched in 2010 with an announcement over the radio that drew masses of women together in a central square where city officials outlined the programme under the slogan ‘Always clean’. At the outset, according to the mayoress who initiated the programme, it had been hoped that the project could mobilise some 10,000 women, with the mayor’s office planning to work jointly with the Ministry of Social Affairs who was to mobilise additional funding from development partners; the partnership, however, did not work out for unspecified reasons. In the event, according to the director of sanitation and health for the city of N’Djamena, some 850 women were recruited by the mayor’s office to cover eight of the city’s ten boroughs (with the remaining two boroughs covered by mobile teams). Criteria for selection from the applicants who presented themselves is not totally clear: mayoral staff mentioned some needs-based assessment criteria and preference for certain categories of vulnerable women, such as widows and other single women; but also note that students were also sometimes selected. They also mention age criteria between 18 and 55, and physical aptness for the job.

After the administrative decentralisation of the capital in 2012, 650 of these women were distributed to the different boroughs under administration by communal mayors, while 200 were retained by the central mayor’s office. Currently, according to the work supervisor of the surface technicians, there are a total of 281 surface technicians who work under the supervision of and financed by the central mayor’s

²⁴ Key informant interview, governor and former mayor of N’Djamena.

office (200 women and 81 men).²⁵ It was not possible in the course of the research to collect detailed statistics on the number of workers employed in the decentralised boroughs), some of whom, either through lack of resources or lack of conviction on the approach, have not continued with this initiative.

With contracts of 6 months renewable on demand, daily compensation was initially set at 40,000 CFA francs (roughly USD 68)²⁶; however, this was later raised to the minimum wage of 60,000 CFA francs (roughly USD 103). Women selected as work team chiefs are accorded an additional FCFA 15,000 per month. Payment is monthly at the central mayor's administrative offices, and this occurs on time (as confirmed by the women we spoke to). At the end of the contract, according to the work supervisor, if a worker decides not to renew, they are owed an end-of-contract indemnity equivalent to 5% of their salary.

Surface technicians are provided with orange safety vests, gloves, and face masks and equipped with work instruments including brooms, rakes, shovels, wheel barrows and traffic icons. After the first year, the surface technicians were given training on road security (by SOGEA SATOM, a French construction company with an affiliate in Chad) and first aid in case of accidents (by the Red Cross). A clinic has been established within the sanitation and health unit of the mayor's road works division which can treat general health problems, according to the chief of sanitation and health services; it also apparently provides referrals or prescriptions for fulfilment elsewhere. Women are accorded three days of leave in cases of ill-health, according to their work supervisor, and also granted three-month paid maternity leave according to the director of sanitation and health; but there are no records available to assess how many have benefited from these provisions.

According to the work supervisor, the job of surface technician consists of sweeping the paved roadways and the market lanes and clearing them of dust and debris, working six days a week from Mondays through Saturdays except on public holidays. For street sweepers, work hours are from 6am to noon, with a half-hour break at 10am, but work hours are shortened to 6-10am in the summer months because of the excessive heat. For market cleaners, work is divided into morning hours from 6-8am before the market opens, and the evening shift from 5-7pm after the market closes.

At the height of the initiative, and prior to decentralisation, the work supervisor explained that there were 42 teams of surface technicians at work, with 16 supervisors; currently there are nine teams of roughly 20 per team at work through the central mayor's office, with just two supervisors. Six of the central mayor's teams are engaged in street sweeping (153 workers in all; 123 women and 30 men) in four main boroughs (2nd, 3rd, 4th, and 6th); the remaining three teams work at three markets (Central Market; Millet Market; and Dembé) (128 workers in all; 78 women and 50 men).

The initiative is financed by the central mayor's office. Exact budget figures were not available, but the annual cost estimates for the employment of 100 women distributed into four teams of 25 each (without counting training or other costs) comes to 97,546,050 CFA francs (approximately USD 164,000).²⁷ Table 2 shows the estimated cost breakdown.

Table 2. Estimated annual costs for the work of 100 surface technicians

Category of expense*	Quantity per year	Salary per month	Unit cost per year	Total cost per year
1. Salaries				
Work team leader	04	75 000	900 000	3 600 000
Other women workers	96	60 000	720 000	69 120 000
Subs-total 1				72 720 000
2. Entitlements (droits sociaux)**				

²⁵ Note some difference with the figures provided by the director of sanitation and health who cited a total of 201 (173 women and 27 men) which may be due to the non-inclusion of market cleaners in the lower calculations.

²⁶ The initial payment was lower, according to some key informants, ranging from 15,000 to 30,000 CFA francs; without written records, the actual figure is difficult to discern; the lower figures may refer to the earlier employment of women cleaners by the mayor's office prior to the initiation of N'Djamena Nadif.

²⁷ Coutts estimatifs, Blandine Nan-guer and Abakar Bichara Oumar, Octobre 2015.

Work team leader	04	-	45 000	180 000
Other women workers	96	-	37 000	3 552 000
Sous- total 2				3 732 000
3.Equipment				
Brooms	1 800	-	5 000	9 000 000
Wheel barrow	6		25 000	150 000
Hoe	48	-	3 000	144 000
Rake	48	-	3 500	168 000
Shovel	48	-	4 000	192 000
Gloves	2 400	-	1 000	2 400 000
Vest	200	-	4 000	800 000
Face mask	2400	-	1 000	2 400 000
Traffic icons	12	-	12 500	150 000
Bongoros	12	-	2 500	30 000
Axe	2	-	2 500	5 000
Coupe-coupe	4	-	2 500	10 000
Raincoat	100	-	10 000	1 000 000
Sous total 3				16 449 000
Unforeseen (5% du total)				4 645 050
Total =sub-total 1+sub-total 2+ sub-total 3 +unforeseen)				97 546 050

**Does not include training or other assistance

*After each 6-month contract, women workers are entitled to a percentage of their base salary

Source: Estimates compiled by the Director of Sanitation and BERDES consultant

4.3 Profiles of women surface technicians and their daily challenges

Other than a record of the names for payment purposes, the central mayor's office does not keep statistics on the women it employs. The research team therefore decided to construct demographic profiles of a sample of women working as surface technicians with the central mayor's office (65 women representing about a quarter (23%) of the total 281 workers and a third (33%) of the total 200 female workers).

Table 3. Demographic profile of women surface technicians, central mayor's office

	Findings	Observations
Number sampled	65	23% of total 281 workers and 33% of total 200 female workers
Residence	Dispersed in 27 different neighbourhoods, with biggest clusters in Walia and Farcha	According to the director, 80% are from some of the most peripheral neighbourhoods of the city
Ages	Range from 22-65; average age is 43.2; 14% are in their 20s; 20% in their 30s; 27% in their 40s; 31% in their 50s; and 8% in their 60s	Over half (58%) are in their 40s and 50s
Level of education	No education: 34% Madrassa: 5% Some primary: 41% Some secondary: 20%	While a third have no education, 2 out of 5 have some level of primary schooling and about a fifth have some secondary education
Marital status	Married: 38% Divorced: 45% Widowed: 37%	The vast majority (82%) are either divorced or widowed.
Number of children	Range from 1 to 16: 1-3: 26% 4-6: 49% 7-9: 19% 10+: 6%	The younger women largely reported the lower numbers of children indicating – perhaps – that their reproductive careers were not yet over. A significant number of women reported child deaths
Number with grandchildren	36 (55%)	Over half of the women in our sample (55%) were grandmothers

Head of household	Herself: 80% Husband: 18% Other (adult child): 2%	The vast majority (80%) reported themselves as heads of households. Of the husbands reported as heads of household, professions included masonry, teaching, police and military service, street sweeping, photography, and one marabout.
Length of work with 'N'Djamena Nadif'	Prior to 2010: 14% Since 2010: 28% Since 2011: 2% Since 2012: 31% Since 2013: 12% Since 2014: 8% Since 2015: 6%	A significant minority (14%) reported working as sweepers for the mayor's office even prior to the launch of 'N'Djamena Nadif' (at a reported salary of 25,000 CFA francs per month; 2 of these women reported working for 26 years. Around 28% are from the initial group recruited to the programme in 2010; the rest started afterwards, with a relative surge, it appears, in 2012, when 31% started – perhaps due to the reorganisation accruing from decentralisation processes.

Source: IDS/BERDES Research team based on field interviews

Staff in the mayor's office highlight the vulnerability of the women recruited as surface technicians, most of whom, they recognize, have no men to support them and large numbers of children to care for.

In focus group discussions and individual interviews, women themselves underscored the challenges they face in their daily struggles to make ends meet. With a large majority either widowed or divorced, most declare themselves to be the heads of their households, with families' dependent on their earnings. Even for married women, their income is critical, as many report their husbands are unemployed. Most women seem to engage solely in work as surface technicians, explaining that the working hours leave little time for other economic activities; others mention that they also engage in petty commerce, but explain that this is undependable and brings in few resources. Prior to engagement on the programme, such commercial activities were often their only source of revenue.

Many speak of the high cost of living in N'Djamena: '*Just for breakfast we can spend 2,000 to 2,500 for nothing but fried doughnuts.*' Of the major expenses cited, the following were top of the list;

- **Housing:** Most women live with their families in rented quarters with high rents (up to 25,000 CFA francs per month. Even when in their own homes, widows in particular often find themselves in an insecure position when relatives of their deceased husband seek to sell his property for their own advantage.
- **Food:** Women report a significant rise in prices for foodstuffs over the past 5 to 6 years. A 100-kg sack of rice, for example, has doubled in price (from 25,000-30,000 CFA francs before to 50,000 to 60,000 today, while a sack of maize has more than doubled (from 18,000 CFA francs to 40,000 today). This means that most women cannot afford to buy in such large quantities and end up spending more for more frequent purchases by *koro* (Chadian measure equivalent to 2.4 kg).
- **Medical expenses:** Women report spending a significant part of their earnings on health expenses. '*You cannot go into anyone's house without finding at least someone sick*' reports one. Many say they cannot afford medicines at pharmacies, but instead turn to street doctors (called '*docteur choukou*').
- **School inscriptions and related costs:** Inscriptions range from 2,000 to 3,000 CFA francs per child at public school and up to 35,000 or more for private schools. Materials and equipment are extra. With large numbers of children to care for, schooling expenses form a large part of household expenditures.

4.4 Processes of recruitment into the programme

Women who have been working with the programme since 2010 report having heard of the work opportunity over the radio. Some were alerted to the recruitment drive through friends or relatives. They

well remember all of the details of being gathered together at the central ‘Horse Roundabout’ where the then woman mayor and the current director of sanitation outlined the programme and their names were registered. More recent recruits mention using personal relations to help them enrol onto the programme. In order to be considered for work, all women need to present their birth certificates and have identify cards. A number in the initial group reported coming back day after day to find out if they had been finally selected and could start their work.

Those women whom we interviewed who are currently on the waiting list have been told by the mayor’s office that there is no new recruitment going on; nevertheless, they note that their names have been written down and that they may be called to replace someone who, for whatever reason, drops out of the programme. A number of them come regularly to the road works and sanitation department in order to be on the spot in case an opening arises. They describe the hardships of their current lives, struggling to make ends meet mostly through petty trade; some say they feel the selection of women for employment with ‘N’Djamena Nadif’ is at times unjust because it leaves out many very vulnerable women like them.

4.5 Positive impacts of the programme

While there seem to have been no specific evaluations of the impacts or outcomes of the programme, officials in the mayor’s offices at both central and communal levels as well as other key informants highlight a number of positive effects that they have observed through their supervisory work and oversight functions. Former mayors also speak of earlier individual testimonies of how women’s lives have changed through participation in the programme (see inset). They also attest to the important impact on the cleanliness of the city.

The women we spoke to were themselves unanimous on the overall positive effects of employment on their lives and deeply grateful to the mayor’s office for providing this work. Said one divorced woman: *‘Before, our husbands used to care for us; now ‘N’Djamena Nadif’ does.’* Said another: *‘We don’t have husbands and we have many children to care for – we are a vulnerable group, so thank God for ‘N’Djamena Nadif’. In any case, we are obliged to work.’*

‘We had not realised at the outset the enormous impact that this work and its small salary would have on the lives of these women... For example, one widow with six children said she was now able to feed her whole family. The work has changed their social status and even the appearance of their children has changed. These women have known how to manage their money.’
(Governor of N’Djamena and former mayor)

‘The testimonies of the women are touching. One, a former sports champion, who found herself alone at home with no job and several children to care for, told us how much this job had changed her life. Women who are employed find their social status raised’
(Former mayoress of N’Djamena, initiator of the programme)

Most of the widowed and divorced

women note that their salary represents the totality of their income; and even the married women note that with husbands unemployed, underemployed or disinclined to share their earnings within the family, their earnings account for almost two-thirds of daily household expenditures and care for children. The women all understand that the mayor’s office devised this programme for a double purpose – to make N’Djamena clean and to help vulnerable women earn a living to support their children. In our discussions, the women pointed in particular to the following positive impacts:

4.5.1 Enhanced care for children and grandchildren

Many women mentioned how important their earnings were for child care, particularly in terms of enabling them to cover expenses related to school enrolment, adequate food, decent clothing, and health expenses, including large medical outlays. *‘It is thanks to ‘N’Djamena Nadif’ that I have been able to feed my children and enrol them in school’* said one. *‘My daughter had been ill for a long time; now with 50,000 from my salary I have been able to afford a cure’* said another. Some of the married women noted that having an income complementary to but independent of their husbands’, enabled them to

participate with more authority in household decisions on child care and, for example, investment in education. Others stressed how important it was for the entire household when the husbands themselves were unemployed: *‘Without my salary’* said one woman, *‘I just don’t know how we would have managed with our children.’* A group of women nodded when one of their members said, *‘Everything hinges on money.’*

‘I am proud of my work: I earn more than my husband (a guard) and contribute to the upkeep of my eight children who can now eat three meals a day – morning, noon and night. I can pay for their school inscriptions and material. I have also been able to afford treatment for my daughter who had been chronically ill.’

4.5.2 Ability to meet housing costs

One woman noted that: *‘I am able to pay my monthly rent now, so at least I don’t have to worry about having a place to sleep.’* Another said, *‘Thanks to this job, I am not on the street with my family.’* One woman reports with some pride that she was able to repair her house after flooding, thanks to her salary from ‘N’Djamena Nadif’. Yet another says that she has been able to move out of her rented accommodation into a house of her own, that she has been able to construct over the years.

In-depth- individual interview, female surface technician

4.5.3 Growing pride, recognition and credit-worthiness

Some women report feeling proud of helping to keep the city clean – *‘Thanks to our work, the city has changed for the better’* says one. Others report a deep feeling of pride in the earnings they bring to their families and note how it has brought them renewed respect from family members. One, for example, reports that her husband drops her off at work on his motorcycle and brags to the neighbours about how well paid she is. Another commented on the public recognition they receive: *‘Everyone knows me at the mayor’s office, now. Also, with our distinctive vests, we can go around everywhere without problem, even in front of the president’s palace or the airport [areas that are heavily guarded].’* Some women, particularly those working in the market area, noted that traders more easily allow them to buy purchases on credit, as they are aware they receive monthly salaries and – so – are considered credit-worthy; some traders even give them coins to buy water. Merchants interviewed at the market all expressed appreciation for the women’s work: *‘The market used to be very dirty’* said one. *‘Now when we arrive in the morning, we find everything very clean.’* *‘We are proud of the women’s work’* said another. *‘They always come on time and do good work.’*

4.5.4 Expanded social network of co-workers

Some women reported on the positive social effects of working with other women outside the normal sphere of family or neighbourhood relations. They meet together, said one, not only in the tontine, but for regular get-togethers for a meal at each other’s homes, each contributing a small bit to the hospitality offered. Other women, however, noted that they had, in fact, cut back on visiting patterns since their work leaves them with little time for such activities.

4.5.5 Increased involvement in informal revolving savings and loans groups (tontines)

Tontines are a widespread mechanism in Chad for group solidarity and economic advancement, particularly among women, who often participate in several different ones at the same time. Ability to participate, however, as well as the level of benefits that such participation brings, depends on the ability to pay in, on a monthly basis. The regular salary earned from ‘N’Djamena Nadif’ allows women to contribute more actively and to draw greater benefits – some reporting monthly contributions of 20,000 CFA francs; this level, however, was said to be easiest for married women whose husbands were working and who therefore could afford to detach a significant part of their own earnings for the tontine.

One elderly widow said that her participation in a 15,000 CFA franc tontine merely enabled her to eat better for that month; another widow said that the tontine allowed her to better care for her grandchildren, under her charge since the death of their parents. A divorced woman who participates in a 10,000 CFA franc tontine said that her earnings enable her to enrol her children in school. The chief

of sanitation and health at the mayor's office recalled a woman who was able to send her child for studies in Cameroon, thanks to her participation in such a tontine.

4.5.6 Use of earnings from 'N'Djamena Nadif' to move into other activities

We were able to meet with at least one woman whose work with 'N'Djamena Nadif' and life circumstances combined in such a way that she was able to use 'N'Djamena Nadif' as a temporary safety net in her time of need, and thereafter, thanks to her participation in the tontine, invest in her own education so that she might one day take on a professional job.

Box 5. Case study of 'N'Djamena Nadif' as a springboard to further education

Aicha (not her real name) started work with 'N'Djamena Nadif' in 2010. She had just lost her husband and had two children to care for. She was living with her sister who told her about the communique on the radio, so she presented herself at the mayor's office and after three days of showing up there, her name appeared on a list of women for work in the Dembé neighbourhood.

Aicha, who loves to clean, says that she felt '*God made this work especially for me*'. At the beginning, she was a bit nervous, but afterwards she says everything went well. She worked for two-and-a-half-years and participated in a tontine for 20,000 CFA francs with her fellow workers.

She heard on the radio a communique announcing a health course at a private institute affiliated with the Ministry of Health. Health appealed to her as an important domain, especially since her work with 'N'Djamena Nadif', which had opened her eyes to a number of key public health issues.

With 50,000 CFA francs gained from her participation in the tontine, she enrolled in the course. For one year, she worked a 'triple day': sweeping the streets from 6am to noon; caring for her children in the afternoons; and attending courses at the institute in the evenings from 6pm onwards. Her children were proud of her work, and she herself was delighted when she heard her children say '*Mama is going off to work now.*'

She then remarried – a retired policeman – who allowed her to rent out a room in his home (which was now hers) and to keep the rent for herself. This money allowed her to enrol in her second year of studies.

In 2012, many women working for 'N'Djamena Nadif' were dismissed as a result of the decentralisation process. When she herself received her dismissal letter, she decided not to re-apply for the job. She is now finishing up her third and final year of course work and hopes to find a public health job in the near future.

Her advice to the women currently working with 'N'Djamena Nadif' is to perform this work with love. Her suggestion for programme organisers is to ensure that all women have the appropriate materials and equipment, including soap to help keep themselves clean and healthy.

In-depth individual interview with female former surface technician

4.6 Difficulties encountered

Mayoral staff and other key informants agree that there are significant risks involved in the work as surface technicians. '*These women are exposed to dangerous health risks*' affirms the chief of sanitation and health at the mayor's department of roadworks and sanitation. '*Even though they have face masks, these are not sufficient to protect them from all of the infections that can be carried in the dust.*' Risks of traffic accidents are also high, as the women's work on the streets exposes them to careless driving practices. '*We must reflect on questions of security,*' states the governor of N'Djamena and former mayor. '*These women are very exposed, and there have been cases of women who were run over, suffering fractures and even death. To limit such risks, we need to put in place appropriate measures.*' According to the women's work supervisor at the mayor's department of roadworks and sanitation, accidents were particularly frequent when the programme first started and the mayor's office contracted with a referral hospital to treat victims; while the number and severity of accidents has decreased, according to this same official, there are still three or four who are hurt each month – mostly from minor

accidents. A third major risk, according to key informants, is of insecurity and harassment on the way to and from work, particularly as many living in the most distant neighbourhoods have to set off for work well before dawn, when ‘bandits’ tend to be out and about in the city.

Women themselves highlight the following challenges they face in their work:

4.6.1 Difficult working conditions

Women agree that their work is hard, and mention in particular the heat and dust. *‘We work all morning under the hot sun and we don’t even have any milk to slake our thirst or soap to wash with’* said several. On the hottest days, *‘even the pavement is burning’* said one working as a street sweeper. *‘We have to clear all of the refuse from the market – some of it quite heavy - and put it into bins as well as clean out the drainage canals’* explains one of the market cleaners. The 6-days-a-week work schedule is difficult for many women; and the double shift for market workers. The fact that none of the women have had a paid holiday or time off since they began their work (some for 5 years since the programme’s inception) is also a hardship. Many women suggest that their compensation should rise with the rising cost of living; others agree. Said one market trader; *‘Their work is good, but they are tired. Most have no man to support them. We should reflect more on their salary.’*

4.6.2 Risks of insecurity and accidents

‘In the beginning, cars passing by acted as if we were not even people’ exclaimed one woman. One reported that a taxi-man said, *‘If I find an ‘N’Djamena Nadif’ worker, I will run over her, because their work bothers me.’* One work team reported three accidents occurring within their group – all involving fractures; they claim that the women in question were not provided with treatment through the mayor’s office, but had to rely on relatives to support them. Another woman said that she had had an accident in 2011 in which her arm was broken by a passing motorcyclist, and that it was the motorcyclist who took charge of all her medical expenses, while the mayor’s office gave her a month of paid leave. Some of the women interviewed either do not remember and/or did not participate in traffic safety or first aid training, while others remember this clearly. All note that certain safety measures are taken: women are provided with bright orange vests, and are told not to cluster together on the highway, but to work singly in order to reduce the risk of accidents. This, however, does not always work. Women also mentioned the aggression some suffer on the way to and from work; this was particularly reported by the market cleaners who work evening shifts as well, but all women often have to travel in the mornings before it is fully light in order to report to work on time.

4.6.3 Insufficient protective material and equipment

A number of women said that the material allotted to them (face masks, vests, gloves) was not always sufficient, wearing out without being replaced; hence they were sometimes obliged to work without protection. Sometimes they had to share. Others mentioned that in the rainy season they would really need raincoats and boots as well. Some noted that the collective equipment assigned to each work group was often insufficient as well – not everyone had a rake or a broom, for example. Women working in the market area seemed to be particularly lacking in appropriate material.

4.6.4 Difficulties with transport

Most women noted difficulties in terms of daily and (for the market workers, twice daily) transport to the workplace. As one woman pointed out, *‘I only earn 2,000 CFA francs a day and must spend 750 on transport – my husband doesn’t work, so how can I meet all my other household expenses with what is left?’*

4.6.5. Health care and expenses

While there is an on-site health officer who is designated to look into health problems encountered by the women, he does not, according to the women, provide free health care; rather he writes prescriptions that they must take to be fulfilled, at a cost, elsewhere. Women are granted 3 days of leave in cases of ill-health, but this does not apply to the sicknesses of children or family members for whom they are responsible, nor for deaths of family members, for which they receive no time off. Moreover, some of

their own illnesses can run over the allotted three days which are not, therefore, covered. If they miss work for any unauthorized reason, the pay is deducted from their salaries.

4.6.6 Negative public attitudes towards their work

A number of women report receiving insults – from the general public, neighbours, and even sometimes family members – about the nature of their work. Says one, *‘People in my neighbourhood mock me – they call me ‘N’Djamena Nadif’; some say that it is shameful what we do. Even my friends sometimes ask me why I am doing this work.’* Some have people say to them, *‘Aren’t you ashamed to be out on the streets sweeping in full view of everyone?’* Others are mockingly called *‘Mme the mayor’*. One woman reported that a male neighbour refused to talk with her, saying she was *‘too dirty’* from doing such work. Another woman, head of a work team, reported that her son had at first insulted her when she decided to take up this work, saying *‘I hope you are going to disguise yourself so that nobody knows who you are’*; however, when she came home with her first pay check and handed some to her son, he took it readily, so she said *‘Aren’t you ashamed to take this money which is so dirty?’* Her husband came to her defence, saying, if such work were available for him, he too would do it. Women assigned to market clean-up, report that some of the smaller merchants harass them, saying *‘Why don’t you stay home and do your sweeping there?’* Some of the married women report that their own husbands’, disapprove of this work, and a number of women field insults from other women in their neighbourhood – including more educated women who, they say, *‘are jealous because we have a job and they don’t.’*

4.6.7 Uncertain status of contracts

There was some confusion about whether the contracts were for three months, six months, or more or less automatically renewed for an indefinite period. A number of women report that they do not have signed contracts, nor do they receive pay bulletins; thus, they say, they do not know whether they are actual employees or not. They say they are told that they are *‘temporary’* workers, but as some have been working continuously since the programme began five years ago, they do not quite understand what this means.

In one specific case, a woman reported that she had started work in 2010 when the programme was initiated, then, after decentralisation, was out of work for three months before being reassigned to a communal mayor’s jurisdiction in 2012, working for another year until she was told there was no more funding for continuation of the programme (though she claims other women were subsequently taken on at communal level). While she received some compensation on dismissal, she claims that this was not the amount due to her, and also claims that she was never actually given a signed contract. In any case, since then, out of a job, without any effective recourse, divorced and with four children to care for she tries to get by through petty commerce. She remains, however, embittered and feels that her rights were not respected: *‘I worked for three years and gave all of my strength – for nothing.’*

4.6.8 Apparent lack of effective complaints mechanism

Some of the women we talked to seemed reluctant to talk about problems – largely out of fear of possible repercussions which, in the worst-case scenario for them, would be losing their jobs. Some women mentioned that their medical expenses were not taken on by the mayor’s office even in cases of work-related accidents, but said they could not complain about this as they could easily be replaced by someone else: *‘The waiting list is long’* they point out. There are work team chiefs who could conceivably function as representatives of others and thus serve as a conduit for women’s voices; but it was not clear to what extent this was the case. When asked about whether the women had had a say in selecting these chiefs as representatives, women just scoffed. Said one *‘She was just presented to us and we were told to do what she says.’*

Box 6. Case study of a surface technician working with the central mayor’s office

Marthe (not real name) is a widow of 35, with three children who depend on her. She lives with her children in the house of beaten earth she had shared with her husband and which is steadily deteriorating after the flooding in 2012. There is no toilet or water at home, so she buys water from itinerant vendors. She used to sell salad, tomatoes and avocados in the market, but since her daughter fell ill, she had to give that up, after spending all that she had managed to save on medical expenses. She occasionally receives help from her father who sends

her millet or rice from his farm in the village. She receives no assistance, however, from her husband's family, who instead want to sell the house where she is now living.

Marthe has worked as a surface technician since the initiation of 'N'Djamena Nadif' in 2010, and has been the chief of her work group since 2011 – promoted to the position because of her level of education (she had reached the 4th year of secondary before dropping out when she got married). She has received training from the mayor's office in both road security and first aid and has the material and equipment that is needed for her work. If this wears out, she sends in a request for more, but sometimes has to work without protection while waiting for her request to be granted.

She finds the working hours difficult, particularly since she lives on the outskirts of town and must leave her home at 4 am every morning in order to arrive at work on time.

She feels her salary of 75,000 (60,000 salary plus 15,000 as work chief) is adequate, but wishes she was provided with additional money when asked to work overtime in the case of specific events in the city. Her children encourage her in her work and her friends from the market where she herself used to sell her produce say she is better off now, as market vendors brings in very little. Thanks to the tontine of 10,000 CFA francs in which she participates she is able to afford the yearly outlays for her children's school inscriptions, and she feels proud that as a widow she is able to support her family.

In-depth individual interview, female surface technician with the central mayor's office

4.7 Information on women working in boroughs under the supervision of communal mayors

The central mayor's office does not have any information on the numbers or work of surface technicians under the jurisdiction of the communal mayoral authorities, nor does it apparently have any channels of communication through which to solicit or share such information. In an attempt to get an overview of the situation in N'Djamena as a whole, the research team appealed to the Governor of N'Djamena for help in sending out simple inventory questionnaires to the communal authorities, but we were unable to complete this exercise within the scope of our field research.

Selected communal authorities were also interviewed in the course of field work, with information as follows:

- **5th Borough:** According to communal officials in this borough, there are 56 women surface technicians covering the three neighbourhoods of the borough; but this is felt to be insufficient. Sanitation issues are a key priority for officials in this borough: these include dealing with flooding, improving drainage systems, and collecting garbage, as well as keeping the streets clean. He too feels that the distribution of heavy equipment from the broader 'N'Djamena Nadif' programme was not done well, and borough authorities are frustrated by lack of resources.

According to one officer, there are on any one day at least a dozen women who are out sick; their medical expenses are not covered by the commune except in cases of work-related accidents; many of the workers are older women who suffer a lot and are exposed to both accidents and insults: '*Get out of the way*' some yell at them, '*You are blocking our way.*' One of the sub-communal officials also commented on the number of road accidents, and suggested to avoid these, the women could perhaps start their work earlier, at 4 am finishing by 8 before traffic starts up and so they will not be in anyone's way; this of course raises the question of working in the dark, with attendant security challenges. He proposed that the women be properly equipped with face masks and also that they be provided with milk to drink '*because they breathe in a lot of dust*' and soap to clean themselves. He also proposed a review of the level of compensation, noting that this is just the minimum wage and does not cover health costs.

This, sub-communal official feels that while the work of women surface technicians is a good idea, they are not always supervised as closely as needed and often leave a portion of the work undone.

Moreover, he continues, *'You find them at 10 am sitting under a tree, crushing peppers into bottles for sale at the market.....If really this is a rest period, they should not be engaging in other activities'* – showing, perhaps, a lack of in-depth understanding of their need for supplemental income. He notes that many women spend a large portion of what they earn on transport to the work site. But on the question of whether more women could not be selected from the direct neighbourhood where they are from, rather than having to travel long distances from other neighbourhoods, he cautioned that this would not always work, as certain socio-ethnic groups would not allow their women to perform such work.

- **6th Borough:** According to a communal official, after decentralisation processes in 2012/13, a number of women surface technicians from the initial 'N'Djamena Nadif' programme, were transferred to the 6th borough. Those who were felt too old for the work were let go and currently there are 45 people (39 women and 6 men) working in the borough, organised in six teams of 7/8 per team. Their borough covers two neighbourhoods which are among the most densely populated of the capital. Contracts were at first for three months, renewable, with most renewed automatically; now, however, they apparently have contracts of indefinite duration.

The women's work week is the same as that of the central mayor's office workers, but the hours differ slightly - with work from 5.30 to 11.30 am. They are offered the same monthly minimum wage as those employed by the central mayor's office (60,000 CFA francs) but they do not have work group chiefs selected from amongst the women themselves – rather they work under the direct supervision of two male borough employees (earning 90,000 each). For the 45 workers, the salary expenses come to 2 million CFA francs (760,000 per month times 12), with an additional 8,600,000 CFA francs for material and equipment, including boots and raincoats.

According to the communal official, *'This is a good investment to help keep the city clean. In addition, this approach has helped us find employment for the women in our borough.'* He hopes to be able to organise a training session on highway safety for the women, as there have been a number of accidents, including serious ones in his borough (in these cases, the women are taken to the hospital and medical costs assumed by his office). He also hopes to be able to expand the programme in the future, if the budget allows, as from his point of view, sanitation activities are a key priority for any mayor: *'A mayor's office is above all about sanitation: the rest follows.'* He feels that the distribution of large equipment from the broader 'N'Djamena Nadif' programme (notably the garbage trucks) was not done adequately: their borough received two trucks but this does not take into account the density of the population.

Box 7. Case study of women working as surface technicians after decentralisation

A group of largely widowed and divorced women working in the 6th borough describe particular differences between their earlier work with the central mayor's office and their current work through the commune. For one thing, they say their working hours have been reduced, but they feel that they are not as well supervised and supported. Moreover, while they say they used to receive their salary regularly and be granted a bonus after every six months of work, the bonus has apparently been dropped and they also often have to wait a couple of months for their salary, with the result that they are continually in debt. They do not feel empowered to raise such issues for fear that they will be let go.

The chief of one of the work groups in this borough had been a fish vendor before starting work with 'N'Djamena Nadif' in 2010; she decided to apply as a surface technician because, after the death of her husband in 2009, she needed a more reliable source of income. She and her workmates work in three neighbourhoods; in addition to sweeping, she is responsible for organising the work, noting absences, and directing traffic by placing traffic icons along the stretches of road they are working. All of this is up to her, she says, and she receives very little supervision from the communal office. *'No one in the office considers this their responsibility'* she notes, unlike with the central mayor's office where supervisors came out frequently to observe their work on the streets, with both monthly activity reports and regular meetings with the head of the cleaning facilities unit being standard practice.

Since her deployment in the commune, she and her co-workers have received no further training in follow up to the sessions in traffic safety and first aid organised by the central mayor's office. She and her work mates have received protective gear and material, but when this wears out, she says, *'It is a real exercise in gymnastics to obtain replacements.'* She finds the work very tiring, particularly as there are so few of them in her workgroup of 6 to accomplish it. *'It takes us two weeks to sweep our principal axis road, and as we slowly advance metre by metre, sand and dirt accumulates behind us as if we had never been there.'*

She is not provided with a supplement for her role as work group chief and is not empowered to really supervise the work of the others in her group, many of whom, she says, are relatives of those working in the commune. She also notes the tardiness in payment of salaries. She has in general lost the motivation she once had for this work. She feels the salary level is low in comparison to the volume of work they are expected to do but *'It is better than nothing.'* She manages to supplement the money she receives from her work in the borough with an additional 25,000 CFA francs gained from renting out rooms in her house and another 20,000 from making and selling cakes.

- **7th Borough:** According to a communal official, this borough did not maintain the women street sweepers allotted to them by the central mayor's office after the decentralisation process in 2012 because they did not at the time have the operational budget to take them on. Instead, in 2013, once a budget was established, they recruited their own women, 130 in all, paying them a daily wage of 2,000 CFA francs; if a woman does not show up for work on a particular day and her absence has not been authorized, she is not paid. Communal authorities suspended work activities along a certain road axis in this borough because of a mortal accident that took place there. They also face problems in regular payment of the women workers.

4.8 Key issues for consideration in looking forward

4.8.1 Perspectives from key informants

The director of sanitation and health at the central mayor's department of road works and sanitation believes that the approach developed for the use of labour-intensive public works in 'N'Djamena Nadif' in the form of women surface technicians has merit; he cites overall positive results, both in contributing to sanitation efforts in N'Djamena and in opening up employment opportunities for poor and vulnerable women. He moreover notes that experiences in other countries, such as Burkina Faso, prove that such approaches can be highly effective. From his point of view, a key issue in moving forward would be to resolve some of the challenges that have arisen as a result of decentralisation processes, so that communes follow a uniform approach and any inequalities in treatment that have may have become apparent are eliminated. His chief of the health and sanitation unit agrees that the programme should continue to expand and the number of women workers increased.

The Governor (and former mayor) of N'Djamena cites the importance of the initiative in fulfilling its double goal of contributing to urban sanitation and providing employment. For the future, he suggests that precautions around safety and security should be strengthened; one possibility that had been reflected on in the past, he says, is to change working hours to the night, which would help eliminate traffic accidents, although he agrees that this would raise other questions of security for women working at night. To overcome problems of transport and security while traveling to work sites, he suggests, it may also be possible to look into the establishment of assembly points from which women could be picked up and taken to their work sites.

The direct supervisor of the mayoral contingent of women surface technicians agrees that issues of safety and security need to be more fully addressed, and that some means of transport should be provided for the women workers. He also feels that a detailed study of the length of paved routes and market areas be conducted in order to provide a better basis from which to estimate the number of workers that would be required to provide full coverage.

A number of informants, point to budgetary constraints that must be taken into consideration in any future plans. The former mayoress of N'Djamena and initiator of the programme suggests that partner

support is needed to expand the initiative, along with pursuit of the initial idea of creating positive synergies with the Ministry of Women, Children and Social Solidarity.

The technical advisor to the Minister at the Ministry of Women, Children and Social Solidarity characterises the work of women surface technicians within ‘N’Djamena Nadif’ as a ‘*model project which touches the most vulnerable of vulnerable groups.*’ After the decentralisation processes which shifted authority to the communal mayors, the regional delegation for N’Djamena is following this up from the perspective of income-generating activities for women. He also notes that certain ministries follow a similar approach in contracting with companies for cleaning services, and that this kind of approach could become generalised.

Some key informants sound a note of caution. For example, the directress of employment and professional training at the Ministry of Civil Service, says that ‘*The work of women street sweepers is good and really addresses the question of unemployment, but a question arises about whether it is really decent employment*’ given that the women workers receive only the minimum wage but no social security. Others agree that the issue of compensation should be reviewed, and also that certain additional benefits be provided, for example, distribution of milk and soap to address concerns about thirst and cleanliness.

4.8.1 Highlights of key issues

Building on these reflections of key informants, the findings of the study overall, and lessons learned from good practices elsewhere, the following may be highlighted as key issues for consideration in any plans to extend or reinforce the programme (see operational recommendations on these in chapter 5)

- *Establishing clear criteria for recruitment and fair procedures for those wait-listed*
- *Ensuring appropriate contractual engagements are respected (signed contracts, provision of entitlements)*
- *Considering compensation package*
- *Establishing effective complaints and grievance mechanisms*
- *Enhancing health and safety measures*
- *Extending social security provisions*
- *Providing regular refresher training*
- *Addressing constraints arising from long distances to work and questions of transport*
- *Providing other forms of symbolic support and care*
- *Enhancing public communications and awareness around ‘N’Djamena Nadif’*
- *Expanding partnerships*
- *Ironing out challenges arising from decentralisation processes*
- *Establishing clear monitoring and evaluation procedures, enhanced information and record-keeping, and fuller documentation processes*

5. Overall conclusions, policy and programme recommendations

As was seen earlier, Chad, like many other countries in Africa and Asia, has a long history with labour-intensive public works, which has been used to support many policy objectives, including food security and strengthening environmental resilience, and has created large amounts of infrastructure, especially in rural areas. However, experience in urban areas has been limited, and few projects have involved providing services (such as street-cleaning) rather than constructing or rehabilitating items of physical infrastructure. Also, public works have not focused sufficiently on social protection principles, but have been more preoccupied with infrastructure and environmental objectives. This concluding chapter offers some broad recommendations for the use of public works in implementation of the SNSP, as well as specific recommendations for the ‘N’Djamena Nadif’ programme.

5.1 Policy recommendations: use of public works in implementing the SNPS

Labour-intensive public works clearly have a role to play in the implementation of the SNPS. However, this requires a stronger focus on the poverty alleviation and social protection objectives and outcomes of public works. What does this mean in practice?

Ideally, access to public works would be demand-led, meaning that work opportunities would be available to everyone who needed work, when they need it. This ‘right-to-work’ principle underlies ‘employment guarantee schemes’, as are found in India. However, this requires budgetary flexibility, as well as the administrative and management capacity to respond to unpredictable and variable levels of demand for workplaces, which in Chad is likely to vary from season to season, in good and bad years, and between rural and urban areas. Building this capacity in Chad will inevitably take some time. A rights-based employment guarantee scheme might be an aspiration to work towards in the future, but this is probably not a realistic policy to consider at this stage of Chad’s development.

On the other hand, if public works programmes are to make a sizeable dent in poverty in Chad, they do need to be scaled up to reach a significant proportion of poor and vulnerable people. This means finding opportunities for larger numbers of workplaces, either continuously or on a regular basis (e.g. for several months each year, if not all year round), and in all parts of Chad – remote rural, close to urban areas, and also within urban areas. Workplaces created should be based on a needs assessment, to identify how many unemployed or under-employed people need access to public works employment. Provision of workplaces should also be responsive to seasonal cycles and shocks, so that more work is available during the annual *soudure* or in drought years. Experience from many countries has confirmed that the implementation of (rural) public works projects should be timed to coincide with the dry season, when farmers have no work (unless they migrate) and their granaries are depleting, leaving their families facing hunger in the pre-harvest months.

Also, the amount of income transferred under public works must be adequate to make a real impact on poverty. Paying workers in food rations, or offering below market wage rates to ‘self-target’ the poorest of the poor, compromises the poverty alleviation objective of public works programmes. Similarly, employing workers for only one or two months, because of insufficient work opportunities or to rotate workplaces to expand the coverage, will not transfer enough income to lift any workers out of poverty. Public works participants should be paid in cash rather than food, they should be paid at a rate equivalent to the local prevailing wage rate for daily labour (and this should be regularly adjusted and indexed against inflation), and they should be employed for several months, giving them regular and predictable income for smoothing their consumption as well as planning and investing some of this income in their own farming or micro-enterprise activities.

Moreover, public works projects in Chad should be managed on ‘decent work’ principles and should follow emerging good practice on implementation and delivery of social protection programmes. This includes: work-sites should be located close to local communities; hours should be reasonable and tasks

should be aligned with capacities (e.g. gender-appropriate tasks should be identified for women); workers should be paid in full and on time; independent complaints mechanisms should be established (to allow targeting errors to be rectified and other grievances to be heard), and more efforts should be built into public works programmes to ‘graduate’ participants into regular employment or more viable and sustainable livelihoods (e.g. through providing useful skills training or apprenticeships).

The limitations of public works must also be recognised in anti-poverty programming. By definition, ‘labour-intensive’ interventions are only accessible to people who have labour capacity – those who can perform manual work. But the poorest and most vulnerable are those who have no labour capacity (such as children, older persons and persons with disability), or those living in households with limited labour capacity (families with high dependency ratios, where a few ‘workers’ support many ‘dependents’). For this reason, labour-intensive public works are only one component of an effective and comprehensive social protection system, which should also include social assistance for poor people who cannot work (e.g. disability grants for those who are chronically ill or who have a severe disability) and those who should not be expected to work (e.g. child benefits for children and social pensions for older persons).

5.2 Programme recommendations: ‘N’Djamena Nadif’

- **Health, safety and social security:** Health and safety issues came to the fore in the majority of our discussions with both key informants and women workers. While programme officials have put in place a number of measures to help mitigate and respond to risks incurred during the women’s work on the streets, these may need to be reinforced. Women should at all times be provided with the appropriate types and amounts of protective gear they need (face-masks of good quality; brightly coloured vests, gloves, and boots and raincoats as appropriate; sun-hats may also be considered during the hottest months.) A stock of such materials should be kept ready for rapid replacement of any materials that are lost or worn out. Traffic cones of sufficient size and number should also be utilized at all times.

Regular follow-up trainings on first aid and traffic safety should be organized, and strengthened linkages with the health sector should include regular inspections of work safety conditions. In case of accidents, the mayor’s office should be responsible for all medical costs, and sufficient paid leave should be provided on return to work. If the victim is permanently unable to return, an adequate disability compensation should be provided. In case of accidental death, the mayor’s office should have a standard protocol compensation package in place.

Consideration might also be given to expanding the current health care system available to the women workers through the mayor’s office: ideas might include expanding the capacities of the existing dispensary to be able to treat more common illnesses; establishing some kind of voucher system to subsidize selected health expenses for women at public health clinics; and providing paid sick leave for both extended and short-term illness. The system of maternity leave said to be in place should be continued, but records should be maintained to keep track and follow up. Conditions should also be established to allow women who give birth and return to work to continue breastfeeding their child up to at least 6 months of age.

- **Distances to work and issues of transport:** While full information on the residences of all the women working as surface technicians is not available, it is clear that many live on the peripheries of town (80% according to the sanitation and health director) and most have to travel great distances to get to work. This incurs costs in terms of both expenses (women spending a significant amount of their earnings on transport) and time (women having to leave their homes before dawn to arrive at work on time, and market cleaners having to effectuate two round-trips per day. It also incurs additional risks of security for women traveling in the dark.

Potential measures to be taken into consideration include: arranging collective transport for women at specified gathering points; redistributing women more rationally according to the neighbourhood so that women can work in boroughs closer to their homes; providing a small transport allowance to at least cut down on the financial burden of transport.

- **Recruitment, contractualisation and compensation:** The exact criteria for the selection of women workers was not always entirely clear, leading to some ambiguity in cases where several women may be on the waiting list, but some may be selected over others. The mayor's office should establish and publish its criteria (according to age, and the specific demographic characteristics it wishes to highlight – for example women heads of household - and any other specifications deemed appropriate. Women on the waiting list should then be selected on a strict order of application when new openings arise. The type and duration of contracts should also be reviewed: if these are six months renewable, with bonuses at the end of each contract period (as we were told), then appropriate procedures should be respected, including the issuing of signed contracts. The mayor's office may also need to take into consideration the rising cost of living in the determination of its compensation scale. While it is entirely laudable that the minimum wage is respected; to our knowledge, this minimum has been determined based on the cost of living in 2009; some update may, therefore, be required.
- **Complaints and grievance mechanisms:** Clear procedures should be established to enable women to raise issues of concern or to seek redress in case of any irregularities or violations of established processes and principles. The roles and responsibilities of the women work chiefs might be reviewed to include or reinforce roles of representing the voices of women within their group and bringing concerns to the attention of programme officials. Regular meetings should be held for this purpose. A review board should be established to consider complaints and work out solutions.
- **Symbolic support and encouragement:** Many women as well as staff and onlookers mentioned the importance of providing additional support to the women in the form of milk and soap. This seems to be something that had been done with earlier city workers and was much appreciated. Provision of this kind of symbolic support would not only help alleviate some of the hardships of the job but would be a strong symbol of the mayor's care and concern for this cadre of women street technicians. Even monthly distributions would be a strong gesture that would help strengthen morale and relations between the women workers and programme officials.
- **Public awareness:** Both programme officials and the women workers noted that they are subject at times to insults and scorn based on negative public perceptions of the type of work they do. The mayor's office should take it upon itself to launch public information and awareness campaigns to address such negative attitudes, to reaffirm the value it places on the work of these women, which is helping to keep the city clean for all N'Djamenois, and to promote respect for their contributions. Artists and musicians could be engaged to spread such public awareness (through posters, for example, or songs, as in the current song by a private artist which insists that there are no 'secondary professions'). The political, campaigning approach of the initial programme, launched under the banner of the President's drive to both focus on 'the social' and to make of N'Djamena the showcase of Central Africa should be maintained with positive support, including – for example - through such things as public awards ceremonies covered by the press and media where the hardest workers could be recognized and honoured. The public information campaigns could also include elements on road and traffic safety so that drivers take more care when driving and accidents are avoided.
- **Partnerships:** It would be useful to reflect on ways to establish a partnership between the Ministry of Women, Children and Social Solidarity and the Mayor's office (s) around the 'N'Djamena Nadif' initiative and the work of women surface technicians, including through strengthened coordination at the decentralised level. The mayoral communal structures have social workers on their staffs, as does the Regional Delegation for N'Djamena of the Ministry of Women, Children and Social Solidarity; collaboration around issues to do with the health, safety and welfare of the women workers would be beneficial. The Ministry might also be able to attract, as in the initial plan around this initiative, development partner support for certain elements of the programme.
- **Documentation, monitoring and evaluation:** The field study revealed a critical lack of written records, reports, or assessments and evaluations of the initiative, as well as a lack of precise information on the detailed demographic profiles of the women workers who are or have been involved in the programme. Yet such information is crucial both for monitoring purposes (to ensure

the programme is going well and to identify needs for course correction) and for advocacy and promotional purposes (to highlight how the mayor's office is contributing to the social protection of the most vulnerable women while at the same time providing a much needed public service). Demographic profiles on all women workers should be established and updated as required; clear indicators on both processes and impacts should be developed and regularly monitored to assess progress and achievements; and regular qualitative interviews could be conducted to establish a series of case studies that could keep tabs on and profile the experiences of different women workers.

- **Decentralisation:** It is clear that the decentralisation processes in the administration of the city of N'Djamena have brought a number of challenges regarding implementation of a programme initially launched by the central mayor's office. This will undoubtedly require ongoing discussions and clarification of different roles and responsibilities, and should include development of clear programme parameters for guidance on the aims of the initiative, criteria and processes for the selection of workers, recommended hours and compensation, and supervisory structures.
- **Budget:** An effort was made to calculate estimated costs for additional support in the form of training activities and expanded social assistance in the case of death of a woman worker or a member of her family.²⁸ As shown on the table below, these are estimated to come to around 21,630,000 CFA francs per year (approximately USD 36,300).

Table 4. Estimated additional expenses for accessories, training and social security

Budget item	Quantity per year		Cost per unit	Total cost
1.Accessories				
Soap	1200		500	600 000
transport	100	10 000*	120 000	12 000 000
Sub-total 1				12 600 000
2.Training costs				
Training of trainers (work team leader) 2x year	2		Estimated	1 500 000
Training of other women workers (1x year)	1		Estimated	1 500 000
Sub-total 2				3 000 000
3.Social security**				
Death of a woman worker	4 (estimated)		5 000 000	2 000 000
Death of a woman's family member***			Estimated	3 000 000
Sub-total 2				5 000 000
Unforeseen (5% du additional total)				1 030 000
Total= sub-total 1 + sub-total 2 + sub-total 3 + unforeseen				21 630 000

*Based on women's estimates of annual transport expenses for work

**Based on same entitlements as for permanent workers at the mayor's office

***Applied to only nuclear family members at the same level as permanent mayoral employees (250 000)

Source: Research team from discussions with the director of sanitation and health

The total budget for the work of 100 surface technicians – including additional expenses for accessories, training and social security – is estimated to be 99,709,050 CFA francs per year. On the basis of this estimation, the cost for a 3-year programme employing 1000 women would come to 997,090,500 CFA francs per year which, over the course of three years would amount to 2,991,271,500 CFA francs.

²⁸ Calculations by M. Bichara, Director of Sanitation and Health, and Blandine Nan-guer, BERDES consultant.

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