Overseas Development Institute

Social Protection Toolsheet

Toolsheet

Appraising productivity enhancing Public Works Programmes

Introduction

This toolsheet provides guidance on how to determine whether a Public Works Programme (PWP) will provide 'productive' social protection, leading to higher productivity and the graduation of households out of poverty. By outlining the key design and implementation questions that need to be assessed, it aims to stimulate informed discussions among policy makers, development partners and governments on the selection and design of appropriate social protection instruments.

Recent years have seen a growing interest in the role of PWPs as social protection responses to chronic poverty, as instruments which promote productivity in the medium term as well as addressing immediate consumption needs through the wage transfer in middle and low income countries.

PWPs are often adopted as the main social protection instrument to address the needs of the working age poor, and implemented alongside unconditional cash transfer programmes for labour constrained households. The focus on PWPs as a social protection instrument has been driven, in part, by the development of two large scale and high profile programmes during the 2000's: the Productive Safety Nets Programme (PSNP) in Ethiopia and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in India – both initiated in 2005.

By promoting productivity at the household and community level 'productive' PWPs are expected to reduce ongoing reliance on social protection, and contribute to local economic development. This makes them a potentially attractive policy option to donors and governments alike.

The critical challenge is to assess whether an intervention is likely to meet the anticipated programme objectives and specified outcomes through a combination of both direct and indirect effects. In the case of a PWP that has productive objectives, this means assessing not only the adequacy of the wage to protect consumption. But also important to consider is the extent to which the intervention is likely to prevent loss of savings and the distress sale of assets (thereby protecting productive potential), promote the accumulation of savings and assets, create appropriate infrastructure, and/or result in skills development, outcomes which could potentially promote productivity, livelihoods and graduation out of poverty.

This toolsheet discusses six key questions to be reviewed when appraising a PWP aiming to promote productivity:

The Productive Safety Nets Programme (PSNP) and the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).

The PSNP was developed as an alternative to the repeated, ad hoc emergency public works interventions which characterised the humanitarian response to cyclical food insecurity in Ethiopia over several decades. The programme aims to provide a planned multi-year response to cyclical vulnerability, providing predictable social protection for food insecure households while also promoting the 'graduation' of households from poverty. It does this by providing PWP employment to create productive assets, together with a range of complementary interventions, such as micro-finance and agricultural extension, while also providing cash transfers for households that do not have available labour. The public works component employs workers from approximately 1.5 million households each year (reaching on average 7 million beneficiaries) and anticipates household graduation from the programme after five years of support. The PSNP has inspired the development of a number of other 'Productive Safety Net Programmes' throughout the developing world.

The MGNREGS guarantees 100 days of employment to rural households each year, acting as an employer of last resort and offering a form of employment insurance to approximately 45 million workers annually. The MGNREGS provides work as an entitlement and assumes that beneficiaries will require ongoing support in a context of systemic labour market failure.

- is the design appropriate for the livelihoods and labour market context in which it will be implemented?
- is the PWP likely to promote productivity?
  - is the wage adequate to meet the consumption shortfall and allow for investment?
  - are the assets productive?
  - is there demand for the skills gained?
  - are complementary interventions in place?
- is the scale of programming meaningful?
  - what is the scale of the programme in relation to the scale of unemployment?
  - are there technical and institutional constraints to scaling up?
  - is the PWP limiting debate on alternative larger scale interventions?
- is the proposal cost effective? Are there cheaper ways to get a similar outcome?
- what is the distribution of productivity gains?
- have key institutional challenges been taken into account?

Question 1: Is the design appropriate?

The most fundamental determinant of whether a PWP will provide a productive safety net or not is the extent to which its design compensates for the type of livelihoods and labour market challenges faced by participants and their pattern of impoverishment: short term disruption of livelihoods, cyclical poverty, or chronic poverty. The key design issues to be considered are the duration, timing and frequency of PWP employment i.e. whether it is provided on a one-off, cyclical, or on-demand basis.

Temporary disruption of livelihoods

If the public works objective is to compensate for a temporary disruption of livelihoods due to a natural disaster, drought or other crisis, a PWP that protects consumption on a short term, one-off basis until livelihoods recover is appropriate. In such instances productivity may be protected *ex ante* by the creation of assets that could mitigate the impact of future shocks (e.g. improved flood defences), and *ex post* by the prevention the distress selling of assets (which could undermine future productivity).

Cyclical/seasonal impoverishment

If the PWP objective is to promote productivity in a context of seasonal impoverishment, a programme needs to be implemented on a cyclical basis. To achieve this it is necessary to provide predictable seasonal employment for vulnerable households on a repeated basis, and to implement complementary programmes to reduce future vulnerability (e.g. agricultural extension, provision of credit).

As with acute crises, a timely intervention can prevent the distress sale of assets and protect accumulated resources. Also, the assets created through a PWP can, potentially, reduce cyclical vulnerability and promote productivity (e.g. improved watershed management systems).

Chronic poverty

If the PWP aims to address productivity in the context of chronic poverty and long term labour market failure, it needs to provide employment on an ongoing or 'on demand' basis, as a form of income insurance to protect consumption, rather than on the one-off basis which is typical of many PWPs. The programme needs to prevent distress sales and promote accumulation, produce assets that will contribute to livelihoods, and be

The importance of timing in cyclical PWPs

One challenge is that the hungry season, which represents the period of peak need for social protection, may coincide with a period of intense demand for agricultural labour. PWP employment may not be appropriate at this time, as participation in a PWP might reduce household investment in domestic production, with negative consequences for productivity in the medium-term. For these reasons it is critical that the timing of PWP employment does not have an adverse impact on production or labour availability at times of peak labour demand. The synchronisation of such programmes with both the agricultural cycle and the cycle of need should be reflected in programme design. This makes programmes highly time-sensitive, and means that implementation delays can significantly undermine programme impact. This is a serious challenge to PWP implementation: programmes are only effective if timely implementation is assured.

implemented in tandem with complementary interventions such as agricultural extension, and micro-finance.

Implications for programme design choice

Selecting the appropriate form of programme to match the specific socio-economic context is critical if a PWP is to contribute to increased productivity. Factors, including the labour market and livelihoods context, patterns of impoverishment and the nature of the risks and shocks faced by the target population will be critical to determine the selection of an appropriate form of PWP: one-off safety net support, repeated seasonal employment, or ongoing employment provision on demand. There is little value in providing short-term or one-off employment to households experiencing cyclical or chronic food insecurity in the hope that this will have a significant impact on productivity (or poverty). Despite this, most PWPs implemented in sub-Saharan Africa, including many with 'productive' objectives, provide this limited form of support (McCord and Slater, 2009).

Question 2: Is the PWP likely to promote productivity?

The main vectors through which PWPs can enhance productivity are:

- the wage,
- asset creation, and
- skills development.

Each vector needs to be considered carefully when appraising a programme to assess whether they are likely to promote productivity in the specific context.

Wage

The wage is only likely to increase productivity where it is adequate, paid regularly, and provided over an appropriate period that matches the duration of livelihoods disruption, to ensure that basic consumption needs are covered.

The value of the wage in relation to the household consumption gap is a key factor. Typically in PWPs (as in all transfer programmes) benefits are used primarily for consumption. Income is only used for human capital investment (education and health) and for savings or productive investments once a household's basic consumption needs are met. Productivity gains are only likely, therefore, if the wage is sufficient to enable households to meet consumption needs and leave a margin for investment.

Some programmes, such as the PSNP and many Food for Work programmes implemented by the World Food Programme, determine the wage level on a needs basis, such as the value of a basic household food basket. However, most set the wage level at or below the prevailing casual agricultural labour market rate, or on the basis of a 'rule of thumb' (often arbitrarily set at $1 or $1.5 a day) in order to make PWP employment unattractive to everyone except the poorest, in an attempt to promote 'self-targeting' and prevent labour market distortion (drawing workers from existing low paid employment) (Subbarao, 2001). In order to assess the appropriateness of the wage it is necessary to consider its likely impact on beneficiary household welfare by, for example, comparing the wage to either mean household income or household poverty gap data for the lowest population quintiles, or comparing it to the price of a basic food basket. Providing a low PWP wage, which replicates the market wage for those at the bottom of the labour market such as landless labourers, may not be enough even to meet basic household consumption needs, and is unlikely to enable investment, the accumulation of assets or savings, or have a significant impact on productivity (Devereux and Solomon, 2006).

Where a low PWP wage is paid relative to household consumption needs, it tends to be used primarily, again, for consumption purposes. Most PWP wages are not sufficiently generous to promote significant accumulation, investment or increased productivity. Where investment does occur, it typically results in an increase in survivalist micro-enterprise activity with low barriers to entry, such as informal trading (e.g. small scale vending of sweets) or home produce (e.g. cakes or smoked fish), with an extremely modest impact on household productivity (see for example Ndoto and Macun, 2005).

As well as being adequate in value, the wage must be paid on time and regularly, or its benefit in terms of protecting assets and promoting productivity may be undermined, particularly where employment is intended to meet time-specific seasonal needs. Where loans are taken out using anticipated PWP income as security, payment delays, which often occur in PWPs, can result in participants facing punitive interest rates and increased indebtedness.

Where PWPs aim to address productivity in contexts of cyclical or chronic impoverishment, limited or sporadic periods of employment are unlikely to result in productivity gains because households tend only to invest in production after their consumption needs are met. The wage needs to be provided on either a recurrent or sustained/on demand basis if significant productivity gains are to be anticipated.

Asset creation

Most PWPs entail the construction of assets, usually physical infrastructure. Whether these assets will increase productivity depends on their appropriateness, quality, and sustainability, and the distribution of usage.

Assets are only likely to result in significant productivity gains for the poor under certain conditions, namely if:

- the assets created are appropriate in terms of addressing local productivity constraints and consistent with local development priorities;
- assets are designed and constructed with adequate technical inputs and are of adequate quality;
- adequate resources are allocated to capital costs during construction;
- asset ownership is established (e.g. local government/community);
- responsibility for financing recurrent costs is agreed;
- responsibility for maintenance and resourced maintenance plans is in place;
- access to and usage of assets is assured for intended beneficiaries.

In many instances these conditions are not addressed during programme design and implementation and, as a result, the impact of assets on productivity is significantly compromised. Capping the capital cost component in PWP budgets can undermine asset quality significantly, and, therefore, their impact on productivity. Examples include the construction of PWP roads without bridges as a result of the higher capital cost of bridges, and the use of sub-standard inputs for road surfacing in order to reduce cost. In both cases, the viability and durability of the assets created is compromised.

Skills development

PWP-based skills development and work experience can contribute to productivity in existing livelihoods and also improve labour market performance (either through self-employment, entrepreneurship or formal employment). However, this is contingent on i) the relevance and quality of the training/work experience provided, and ii) the existence of unmet market demand (for labour, goods and services). Skills development in the absence of market demand is unlikely to have a significant impact on productivity (McCord, 2007).

When appraising the likely contribution of PWP skills development to productivity, it is critical to examine the nature of training provided, and link this to an analysis of market conditions, particularly skills shortages, as PWP training can result in the substitution of one set of workers for another, rather than an overall increase in employment.

It is also important to consider the operational challenges inherent in providing meaningful training in contexts of short-term or seasonal employment programmes, and the availability of training service providers with the appropriate skills.

Complementary interventions

Finally, it is necessary to consider whether appropriate complementary interventions, such as access to agricultural credit or inputs, extension programmes or savings schemes, are in place to assist workers to derive benefits from the assets created and translate any capital and skills accumulated through PWP

participation into gains in productivity. Access to such programmes is central to the design of Ethiopia's PSNP.

Question 3: Is the scale of programming meaningful?

There are examples of large scale PWP provision. As mentioned above, 1.5 and 45 million households participate in the PWP component of the PSNP in Ethiopia and the MGNREGS in India respectively each year. Programmes implemented at such a scale have the potential to promote productivity through both the assets created and also the demand stimulus they represent. However, most PWP in low income countries employ only tens, or at most hundreds of thousands of workers and typically represent a limited and diluted source of economic stimulus at local, regional and national levels.

The proposed numbers of programme beneficiaries need to be considered in relation to the total number of eligible households, rather than in terms of absolute numbers, to assess the adequacy of the scale of a proposed intervention. A programme with extremely low levels of coverage may not represent an effective or cost-efficient approach to either social protection or productivity enhancement.

Given that many programmes will initially be implemented on a relatively small scale with limited coverage, it is critical to appraise the feasibility of scaling up, and consider potential constraints to increased coverage. The most significant challenges to public works programming at scale are:

- ability to identify, design and execute the large number of labour intensive projects required to provide ongoing work in any one location
- availability of technical expertise for design and implementation of labour intensive PWPs
- local programme management and administrative capacity
- lack of incentives for local government and engineers to adopt labour intensive approaches to asset construction
- high cost of public works programming given the administrative and capital costs.

There are often political incentives to launch productive safety nets for both governments and donors; such programmes can have great symbolic value that may be electorally important, or they may enable donors to make significant loans or grants in support of the social protection sector which governments might hesitate to accept for alternative instruments such as cash transfers. But there may not be equally strong incentives for either governments or donors to ensure that programmes are implemented on a scale that is likely to have a significant impact on productivity at local, regional or national levels. Where programme participation remains diluted, potential multiplier effects at both household and local level are likely to be limited.

Question 4: Is the proposal cost-effective?

The full costs of PWP implementation are often underestimated. It is important to interrogate budgets to ensure that full technical, administrative and management costs are included, particularly at local government level (PWPs often imply additional work for existing district and local staff), as well as recurrent costs for maintenance, etc, and consider these in relation to anticipated social protection and productivity benefits. These costs tend to be excluded from the PWP budget, placing an unfunded and 'hidden' burden on local government. The key questions to consider include:

- are cost assessments realistic?

- are adequate resources allocated to decentralised implementation teams?
- are there financial incentives for effective programme implementation at local level?
- would the programme be viable (in terms of government and/or donor financing constraints and preferences) if implemented at scale?

Only once full costs are identified can a PWP be evaluated in terms of value for money, and compared with alternative social protection and productivity enhancing interventions.

PWPs are a more expensive way to deliver cash to households than alternative social protection instruments, such as cash transfers, in terms of cost per dollar of transfer delivered. This is due to the additional capital, technical and managerial costs implied by employment and asset creation. This premium is justifiable if the skills and assets created will promote commensurate economic benefits and productivity gains, either for the beneficiaries or the wider economy.

There is a risk that assets created through a PWP may be more costly than assets created using conventional approaches, and that their quality may be inferior. If the assets could be created using alternative means that are significantly cheaper, or have better quality outcomes, the economic rationale for adopting a PWP-based approach to productivity enhancement may be poor.

In order to make this assessment there is a need to consider the following issues:

- what is the full cost of the programme?

- what is the premium for delivering social protection through PWP rather than alternative instruments?
- what is the anticipated productivity impact and how does this compare to the premium?
- what are the implications of creating productivity enhancing assets using a PWP compared to conventional methods in terms of relative cost and quality?
- what is the basis for assuming that the asset will result in productivity gains and for whom?

While not all of these questions may be readily quantifiable, it is nonetheless valuable to consider the challenges they raise, the viability of the assumptions and theories of change on which they rest, and whether the likely costs are proportionate to the likely impacts.

Question 5: Who benefits from PWP productivity gains?

It is important to consider the distribution of potential productivity gains arising from PWP implementation, i.e. whose productivity does the programme enhance? There are two aspects to this question; i) are some households excluded from PWP participation and associated household level productivity gains, and ii) how are any indirect productivity gains resulting from PWP implementation distributed among PWP worker and other segments of the population?

Depending on their design and objectives, PWPs can result in the deliberate or unanticipated exclusion of some eligible poor households, and inclusion of those who are less poor from direct programme. Deliberate exclusion of the poorest from programme participation is a particular risk if household or community level productivity gains are prioritised over objectives relating to equity or reaching the poorest. Those in greatest need of support might be the least likely to experience PWP-induced productivity gains as a result of a given intervention, due to their depth of poverty or limited labour capacity, and for this reason they might be purposively excluded from programme participation. This indicates a potential tension between productivity and social protection objectives, whose

implications need to be considered explicity during appraisal.

If promoting the productivity of the poorest is a concern, the extent to which programme design takes account of barriers to participation by poor households with high dependency ratios (a limited number of working age members relative to those of non-working age) should be assessed. Such households can be encouraged to participate through the adoption of flexible terms of employment, including flexible working hours, seasonal employment, part time employment, acceptance of worker substitutes in the case of either sickness or the availability of alternative temporary work opportunities, women-only work groups, and provision of child care facilities. Employment on such terms can affect the extent to which poor households with labour constraints can benefit from PWP employment, and prevent the capture of PWPs by households that are less poor and have 'spare' labour (Barrett and Clay, 2003). Design details should be informed by local cultural, economic and social considerations.

It is also important to consider the likely distribution of indirect productivity gains derived from assets created through public works programmes. It should not be assumed that those employed to create the assets will also be the beneficiaries of any resulting productivity gains. For example investment in watershed management is likely to result in benefits which are distant in both time and space from the point at which the PWP activity took place. Similarly community members who are less poor than PWP participants may be better able to capture productivity benefits arising from investment in road infrastructure or irrigation due to social or institutional factors, or their superior asset base.

Considering these issues will assist in making a realistic appraisal of the likely distribution of potential direct and indirect productivity benefits.

Question 6: Have key institutional challenges been taken into account?

Institutional factors can also have an impact on productivity outcomes and should be included in an appraisal. These will vary from context to context, but two common institutional challenges relate to management structures and evaluation mandate and capacity.

Donor funded structures, such as *Project Implementation Units* (PIUs) or *Management Units'* (MUs), are often created to facilitate PWP implementation, parallel to the institutions of the state. While such structures can promote initial benefits in terms of rapid programme roll out, parallel programming can undermine prospects for the national and local level coordination between the ministries with relevant mandates necessary for the complementary programming approach outlined above (e.g. ministries of agriculture, water resource management, labour and public works), and may also compromise programme sustainability, due to factors such as the adoption of non-government salary scales, and reliance on external financing.

Institutional capacity for the monitoring and evaluation (M&E) of PWPs is often limited and inadequately resourced, with the result that ongoing management information regarding PWP performance and impact can be a significant challenge. Systems tend to focus primarily on short term process or output indicators, and often fail to gather adequate baseline data to enable effective impact assessment, particularly in terms of changes in productivity (IEG, 2011). When PWPs aim to enhance productivity as well as social protection, the proposed M&E plan and log-frame should include robust medium term outcome indicators to capture livelihoods, productivity and economic development changes at household, community and, where appropriate, also regional and national level, and the theory of change should make explicit the assumptions underlying the programme rationale. Institutional responsibility for the management and implementation of impact evaluation should clear, and this should be backed by an adequate budgetary allocation. Consideration of the adequacy of the proposed M&E approach is an important part of programme appraisal.

Conclusion

Consideration of the six key questions set out in this toolsheet will enable those appraising public works-based productive safety nets to assess both the strengths and

weaknesses of proposed programmes, and identify areas for further dialogue and exploration. It is hoped that this will promote greater debate on appropriate policy selection and programme design among development partners and governments.

References

Barrett, B. and Clay, D. (2003) Self-Targeting Accuracy in the Presence of Imperfect Factor Markets: Evidence from Food-for-Work in Ethiopia. Journal of Development Studies, 39(5): 152-180.

Devereux, S. and Solomon, C. (2006) Employment Creation Programmes: The International Experience. Issues in Employment and Poverty. Discussion Paper No. 24. Geneva: Economic and Labour Market Analysis Department, International Labour Office, August 2006.

IEG (Independent Evaluation Group) (2011). Social Safety Nets: An Evaluation of World Bank Support, 2000-2010. Washington, DC: Independent Evaluation Group, the World Bank Group.

McCord A. (2007). A Critical Evaluation of Training within the South African National Public Works Programme. In A Kraak & K Press (eds) Human Resources Development Review 2008. Cape Town: HSRC Press: 555 – 575.

McCord, A. (2008) A typology for Public Works Programming. Natural Resource Perspectives 121, December 2008. London: ODI.s Development.

McCord, A. (2008) The Social Protection Function of Short Term Public Works Projects in the Context of Chronic Poverty. In Barrientos, A and Hulme, D. (eds) Social Protection for the Poor and Poorest: Concepts, Policies and Politics. UK: Palgrave: 227-246.

McCord, A. and Slater, R. (2009) Overview of Public Works Programmes in Sub-Saharan Africa. London: ODI.

Ndoto, M. and Macun, I. (2005). World Wide Fund for Nature Rapid Socio-economic Survey of Working for Wetlands. CASE. Unpublished.

Subbarao, K. (1997) Public Works as an Anti-Poverty Program: An Overview of Cross-Country Experience. Paper submitted for the invited session of ASSA Annual Meetings, 3-5 January.

Subbarao, K. (2001) Systemic Shocks and Social Protection. Role and Effectiveness of Public Works Programs. Africa Region Human Development Working Paper Series. Washington, D.C.: The World Bank.

Selected resources for further information

del Ninno, C., Subbarao, K. and Milazzo, A. (2009) How to Make Public Works Work: A Review of the Experiences. SP Discussion Paper No 0905. Social Protection and Labour,Washington, D.C.: The World Bank.

DFID (2011). Cash Transfers Literature Review, Policy Division. London: DFID.

DFID (2011). Guidance for DFID Country Offices on Measuring and Maximising value for money in cash transfer programmes. http://www.dfid.gov.uk/What-we-do/Publications/.

Taylor, G., McCord, A. and van Seventer, D. (2005) Limpopo Province Labour Intensive Rural Roads Maintenance Programme (Gundo Lashu) Cost Comparison.

This toolsheet was produced by Dr Anna McCord.

Thanks go to DFID who commissioned and financed the toolsheet.

Photo credits:

Page 5. NREGA project, Hooghly, West Bengal © prolay hazra/flickr.com (2010)

Page 6. PSNP Photo 209, Ethiopia. © CARE EDU/flickr.com (2011)

Social Protection Programme

Overseas Development Institute

111 Westminster Bridge Road, London SE1 7JD

Tel: +44 (0)20 7922 0367

Fax: +44 (0)20 7922 0399

Email: a.mccord@odi.org.uk