

Carbon footprinting of Global Fund grant programmes – feasibility of measurement during operational phases



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Introduction

Previous studies by the UNDP, working with Arup, have demonstrated the feasibility of developing a measure of carbon footprint for the delivery of Global Fund health programmes. This method allows a grant programme to be assessed during the development of budget planning – a useful tool to inform the effect of a chosen grant strategy on overall carbon footprint. The challenge then becomes one of demonstrating how the actual delivery of a

programme performs in carbon terms, and in providing this information during the grant operational phase – to inform the decision making of those individuals actually delivering grant activities.

This study examines whether the techniques used previously for assessing grants can be effectively and practicably used during the operational phase, and if not then what alternative strategies are available to the UNDP-GF and its partners for achieving this.

Background to carbon footprinting of grant programmes

In 2012/13 year Arup and UNDP undertook a study to quantify the carbon footprint associated with the delivery of Global Fund health programmes in Tajikistan and Montenegro¹. The analysis technique used grant-level budgeting and financial information to develop an estimate of the carbon footprint of the activities and procurement undertaken within the grant programme. The analysis used a database of standard industrial sector carbon intensity factors, combined with the budgeted expenditure within each component of the grant, to build up the overall carbon footprint of the grant. The approach was applied to HIV/AIDS and Tuberculosis grants in the two countries, and the results provided guidance on the relative contribution of different areas of activity – from procuring medicines and medical equipment internationally, through to the use of vehicle fuel for monitoring and evaluation work carried out within the country.

This assessment of a global health programme was the first of its kind, and provided insights into the areas where the UNDP and its practitioners could focus efforts to reduce carbon emissions from grant programmes. These opportunities are present at both the strategic level (where the focus of grant activities are considered), through the procurement process for goods and services, and finally to operational activities undertaken by the Project Implementation Unit for a given grant programme.

Given the tight coupling between budget and outturn expenditure it was decided to use budget spread sheets as the main data source for analysis. These documents are fairly well standardised across UNDP-GF, and provide a good level of detail on what is being undertaken within a grant to inform the carbon assessment. However, such an approach is based on the assumptions implicit with the budget planning process, and do not reflect the reality of programme delivery, and any variations from the planned activities and procurement set out in the project plan and budget phase. The challenge is to understand whether the existing method can be used in such a context, or whether an alternative approach is required to deliver day-to-day carbon measurement of a grant programme.

Study scope

In broad terms this study does not have a geographic or subject-specific scope, being focused mainly on the systems and processes which underpin the development of a grant programme, and the reporting which is carried out during, and following, its delivery.

However, for the purposes of this paper the main source of information has been drawn from the Project Implementation Units for the health programmes in Tajikistan who provided information for the original study, and supplementary information to inform this paper.

Challenge

The previous footprint studies have focused on single datasets of compiled budget data, with supporting descriptions of individual grant activities, and build-ups for certain categories of budget costs. In principle the calculation approach could be similarly applied to outturn expenditure, assuming the financial data for each element of a grant programme could be provided in suitable format, but this exercise has not been carried out (retrospective analysis of grants being less directly useful than those carried out in advance, or during, grant delivery).

In principle the method could be carried out at any given point in a grant period – assuming that information could be provided, at that point in time, on all aspects of a grant programme. Based on discussions with UNDP implementation and management teams, there is no existing reporting process which provides grant data in such a format.

The challenge is to understand if there is a means to identify and collate expenditure data in a suitable format within the existing reporting systems.

¹Carbon footprint of UNDP Global Fund health initiatives in Montenegro and Tajikistan: http://www.eurasia.undp.org/content/rbec/en/home/library/hiv_aids/Carbon_footprint_UNDP_Global_Fund_health_initiatives_Montenegro_Tajikistan/

Context of a reporting system

Structure of a grant programme

A simplified structure for a typical health programme has the following participants (as shown in Figure 1):

- The Global Fund – ultimate funder of grant activities
- The UNDP (Principal Recipient of funds) – coordinates and measures funding and delivery of grant programmes;
- Sub-recipient organisations – carry out the activities funded by the grant.

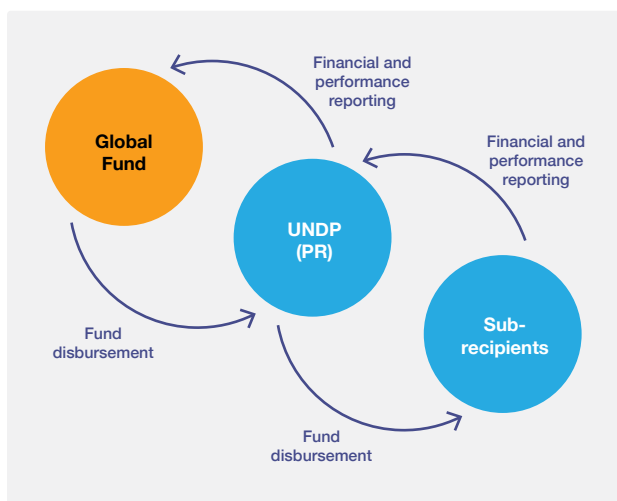


Figure 1. Simplified grant delivery structure

The capacity to monitor carbon on an on-going basis is of interest at two levels:

- allowing the UNDP to monitor the carbon associated with how sub-recipients deliver programme activities; and
- allowing Global Fund to monitor the high level carbon performance of their funded projects.

Any operational reporting system for carbon needs to operate at a level of granularity similar to other existing project reporting systems – which comprise two main reporting systems: financial reporting and reporting on delivery against project outcome targets.

Examining the existing reporting systems provides insight to the level of detail any carbon reporting must operate at. To understand this it is necessary to consider the typical structure of a grant programme.

The terminology applicable to grants is changing with the introduction of the New Funding Model, but the principles are largely similar to those used in the previous funding regime.

1. Financial management between Global Fund and the Principal Recipient

Funds for grants are distributed to the Principal Recipient (PR) which is the UNDP in the case of the grants being studied. The PR is responsible for reporting to the Global Fund on the progress of grants – i.e. how much money is being spent, and how is the programme performing against delivery targets. This reporting is done through the completion of Progress Update and Disbursement Request (PUDR). The PUDR documents:

- financial activity during the reporting period;
- description of progress towards achieving the agreed targets;
- a summary on procurement and supply management (PSM) – that is procurement of key goods;
- a self-assessment analysis;
- an annex on sub-recipient financial information (not always required).

Disbursement of funds from Global Fund to the PR is reliant on the PUDR being submitted and approved.

The PUDR is an important standard reporting format, but it does not contain detailed financial transaction information. It contains aggregated data that allows the Global Fund to review expenditure at summary category levels. The PUDR is completed by the PR based on a large amount of transaction data which is collated to inform expenditure against budget at an aggregated level.

2. Financial management between Principal Recipients and Sub-recipients

The PR is responsible for managing the distribution of funding to sub-recipients, for direct purchasing from suppliers, and for attribution of funds to UNDP activities.

The UNDP uses the ATLAS system to record all financial transactions for grant programmes. ATLAS forms the main system for managing data relating to this expenditure, and is maintained by the PR through the receipt of invoice and transaction information from sub-recipients and other parties.

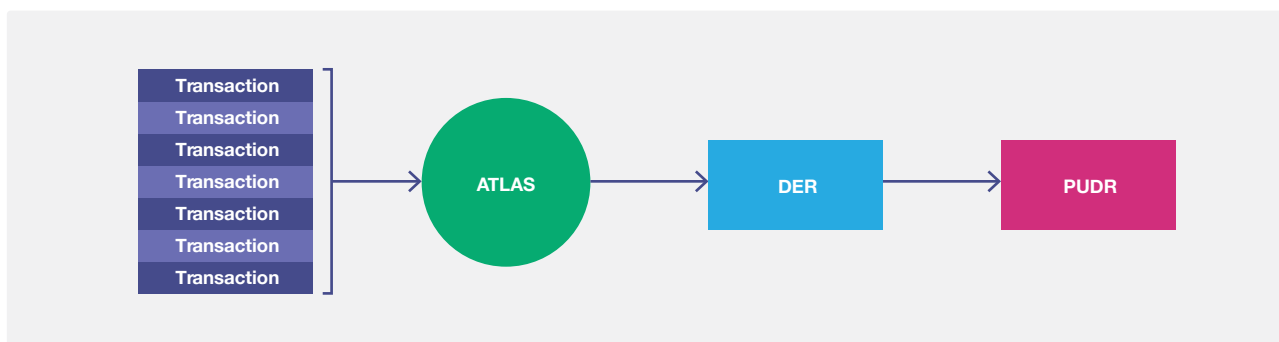


Figure 2. Schematic of UNDP financial management system

The data used to populate the PUDR is largely taken from ATLAS, although this goes through an additional structured document – the Detailed Expenditure Report (DER); see Figure 2

Transaction data within ATLAS comprises many fields of information – detailing expenditure activity, but also how this relates to the overall structure of the grant. Sample data received for Tajikistan included an ‘Activity’ field – which referenced the SDA level of the grant programme.

Carbon reporting – target audience

The level of detail at which carbon is reported (i.e. the granularity of the information) is likely to be dependent on the audience:

- Those people in charge of operational data need granular analysis;
- Those interested at a strategic and overall performance level need less granular analysis.

In order to provide an aggregated carbon value at the same level of granularity as is available for financial information in the PUDR it would be necessary to either:

- calculate the carbon footprint of each constituent activity within the programme (the same principle of assessment as has been carried out in the completed studies); or
- calculate the carbon footprint of a smaller sub-set of key activities which are then scaled to represent an overall carbon footprint.

The second option has the benefit of being quicker to carry out (important if reporting is done frequently) but has the drawback of requiring assumptions to be made around scaling.

Potential strategies for on-going monitoring

There are various strategies which could be adopted to provide an indication of carbon emissions on an on- going basis during delivery. Three examples are set out below.

The first of these would be to use an average carbon intensity for each grant activity (as is done at present) and try to determine the expenditure on this activity at any given point in time (using reports generated from ATLAS). This is technically feasible but it is important to note the following:

- With this approach there is a disconnect between the carbon analysis and the choices made around grant delivery – i.e. the only way an activity can be demonstrated as having a lower carbon footprint is for less money to be spent.
- The analysis methodology used for measuring the carbon footprints of grants in previous studies looked at similar activity types, and developed an average profile of expenditure for that activity type. But this average will not match with all examples of that activity – and so some may appear to have lower or higher carbon emissions than expected during on-going reporting.

The second approach would be to make use of information within ATLAS. An approach which has been used in other carbon studies is to use carbon factors which are specific to the ledger codes within ATLAS. This way an amount of expenditure (say, on vehicle fuel) will be recorded in ATLAS under a ledger code for fuel. An appropriate carbon factor for each ledger code can be developed. This will then give an estimate, at any point in time, of the carbon emissions for each ATLAS transaction and the activity it relates to, which can then be aggregated to report by category. The drawback to this approach is the uncertainty around the level of detail and complexity across different grants – e.g. the ledger code for ‘2nd line



antibiotics' will not necessarily contain detail on where drugs were procured (reducing the scope for tailored carbon intensities) although there may be methods for resolving this ambiguity.

The third approach is quite different to the two above, in that instead of attempting to calculate the carbon emissions of each activity, instead a set of 'indicator activities' is used. The principal is that instead of assessing the carbon footprint of all the pharmaceuticals bought, instead the carbon emissions associated with (for example) treating a single HIV patient is calculated. This approach has some merit in that it allows the following to be done:

1. the process steps in delivering an activity become better understood (e.g. where do drugs come from; how are they transported; how is a patient travelling; how are sub-recipient employees travelling; how are test results obtained etc);
2. instead of trying to understand the footprint of small items within a grant, cash transactions on food and drink and such-like, rather the focus is on the large and expensive components of the grant;
3. it may facilitate easier comparison between grant programmes in different countries; although conversely may provide fewer opportunities for comparison between different disease programmes;
4. there is the benefit of producing a small number of indicators to show general progress at the level which the Global Fund is interested; but provides poor granularity for the management of sub-recipient organisations.

Conclusions

It is concluded that the preferred approach to on-going monitoring depends on the target audience for reporting. However, in general the detail contained within ATLAS forms the most robust dataset for understanding, at a given point in time, what monies have been spent on what grant activities. It is understood that recent work has been undertaken to update ATLAS to reflect changes to the administration of grants in line with the New Funding Model. As such it appears a prime source of information for the carbon footprint analysis during operation.

Adopting an approach based on this dataset would allow for relatively quick assessment of carbon footprint. Standard carbon intensities can be developed for each of the Ledger Codes contained within ATLAS for a specific country. Once these are developed, then estimating the carbon footprint at a given point in time becomes relatively straightforward.

Discussions with the UNDP have identified that ATLAS contains detail on individual transactions to a granular level of detail – down to the 'Activity' level which was used for the previous carbon footprint studies. At the 'Activity' level ATLAS records ledger codes which reflect the project, donor and fund attached to each transaction. This means that a financial transaction based approach appears viable.

The technique of using financial transaction data, combined with using carbon factors specific to accounting ledger codes, has been used by a number of large organisations. This approach has formed the basis of NHS Carbon Footprint studies in the UK and the UK Higher Education sector, along with a number of large private organisations, although primarily as an annual reporting mechanism, rather than an on-going reporting system. However, the calculation method is robust.

The use of ATLAS as the basis of a corporate accounting system offers considerable opportunity for the UNDP. In addition to providing a means of reporting and monitoring on the delivery of grants, it also offers opportunities for corporate reporting across the UNDP and potentially other UN organisations which share the ATLAS platform.

It is recommended that a trial exercise for monitoring the on-going grant delivery carbon footprint is initiated, which will demonstrate the applicability of this method, and will assist in understanding where other opportunities for its application exist within the UNDP.



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