ON RESOURCE ALLOCATION SYSTEMS

Comments in response to GCF/B.05/05 (30 September 2013)

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Benito Müller

The following comments on the Business Model Framework background paper on "Allocation" are intended for the participants of the fifth meeting of the Green Climate Fund in general and of the ecbi GCF caucus meeting preceding it. Quotations from the background paper are in blue, and its section headings are used in order to facilitate cross-referencing (with the headings of sections without comments being left out).

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I. Introduction

2. The purpose of this document is to present to the Board an assessment of allocation procedures of other multilateral funds, their benefits, disadvantages and applicability, including results-based approaches to allocation.

While it is important to look at the experiences of other multilateral funds, it is not self-evident that best possible practice is necessarily to be found among them. It stands to reason that looking at other, similar cases might also be helpful. Indeed, two recent OIES publications are doing exactly that:

[1] ***Quantity Performance Payment by Results: Operationalizing enhanced direct access for mitigation at the Green Climate Fund*** (Benito Müller, Samuel Fankhauser, and Maya Forstater, 2013)[1] looks at lessons for the use of quantity performance instruments as used in the Brazilian Amazon Fund in the context of the Norwegian International Forest Climate Initiative.

[2] ***The Allocation of (Adaptation) Resources: Lessons from fiscal transfer mechanisms*** (Müller 2013[2]).considers lessons from fiscal transfer mechanisms, i.e. instruments used to allocate central tax revenue to sub-national governments, for the allocation of (adaptation) resources.

II. General considerations on the Fund's resource allocation system

5. **Definition of the resource allocation system.** The resource allocation system (RAS) is the set of policies and procedures that the Fund uses to channel the resources it receives from various sources to projects or programmes to meet the strategic objectives of the Fund. Application of the RAS starts with the execution of financial instruments between the Fund and contributing sources and ends with the execution of financial instruments between the Fund and the project or programme financial intermediary or implementing entity. In terms of the project cycle, the focus of the RAS is on the design stage of the project or programme –up to the time the proposal is approved by the Board.

What exactly does this mean? The 23 August draft had a somewhat simpler definition:

3. In this paper a "resource allocation system (RAS)" is defined as a procedure whereby the Board makes indicative allocations of monies to categories that may be countries or types of activities or types of financial instruments.

Initially a RAS was thus taken to be a system for allocating moneys to 'categories' independent of project/programme funding transactions. In the latest version, by contrast, the RAS seems to include the policies and procedures which determine these transactions. The RAS is thus, in particular, taken to include the sort of procedures that are traditionally referred to as the "project cycle." Whether this is appropriate is open to debate. On the one hand, it covers the sort of "endogenous" resource allocations referred to in [1] where the resource allocation is determined *ex post* by the totality of such transactions. On the other, subsuming everything to do with the project cycle under the concept of 'allocation' may be stretching the concept somewhat. In any case, most if not all of the final paper turns out to be about Resource Allocation in the more narrow sense used in the August draft.

6. **A "performance-based" resource allocation system (PBAS)** is one that allocates resources to entities on the basis of their performance prior to making individual approval decisions on proposed activities.

7. **A "results-based" resource allocation system (RRAS)** takes the performance-based allocation system concept one step further. Every performance-based allocation system uses an allocation formula that includes performance variables, most of which relate to policy and

[1] www.oxfordenergy.org/wpcms/wp-content/uploads/2013/07/EV-59.pdf
[2] www.oxfordenergy.org/wpcms/wp-content/uploads/2013/09/The-Allocation-of-Adaptation-Resources.pdf

institutional performance but some of which are measures of actual results. The RRAS takes this a step further by including more variables that are measures of actual outcomes (in addition to needs variables and policy/institutional performance variables).

It is important to be aware of the fact that there is no accepted consensus on what any of the terms introduced in this section mean. The proposed definitions thus do not reflect a common usage. They only define the meaning given to these terms by the authors for the purposes of the paper. Moreover, the proposed distinction between "performance-based" and "results-based" seems to be somewhat artificial (which may be why the two terms seem to be used interchangeably in section 5.1)

Purpose and Guiding Principle

The paper also includes a definition of the purpose of an RAS, and some guiding principles:

10. **The purpose of a RAS** is to deliver strong results by increasing allocation effectiveness.

11. **Guiding principles.** This document puts forward five guiding principles for the Fund's RAS based on the Governing Instrument and the review of the RASs of other multilateral funds. The Board may wish to consider the following principles for guiding the development and implementation of the Fund's RAS:

(a) **Strategically focused.** The RAS will focus on meeting the Fund's specific mandates, objectives and priorities;

(b) **Country-driven.** The RAS will provide an incentive for paradigm shift towards low-emission and climate-resilient development pathways, and will promote and strengthen engagement at the country level through effective involvement of relevant institutions and stakeholders, including in the private sector;

(c) **Results-based.** The RAS will be designed to increase the effectiveness of the allocated funds in achieving the objectives and result areas of the Fund at the global, national and sub-national levels. This could include mechanisms to incentivize the achievement of paradigm shift, scale and ambition, as well as the strengthening of enabling environment;

(d) **Efficiency.** The RAS will allocate resources there where it is expected to deliver the most transformational impacts for the Fund's objectives, whilst employing a simple process to minimize total operational time and resources needed by the Fund and the implementing entities to programme and approve projects; and

(e) **Predictable and transparent.** The RAS will be designed to increase the predictability of allocations to facilitate programming decisions at the country, financial intermediary and/or implementing entity levels. The policies and procedures of the RAS will be carried out in a clear and open manner and will be publicly disclosed.

12. The purpose and guiding principles constitute a clear foundation on which the Fund's RAS will be developed for initial implementation and evolution.

At first sight, the proposed purpose and guiding principles may seem innocuous, but it is important to think very carefully about possible implications before any of them are adopted. However, before discussing the principles that have been proposed, consider the one principle which is conspicuous in its absence: equity. While we have "results," "effectiveness," and "efficiency" (some of them occurring in multiple instances) there is no mention of the fact that a RAS must be (seen to be) fair/equitable/just. ***This lacuna is critical and must be filled***, possibly with language along the following lines:

(c) **Equity.** The design of the RAS take into account of the principle of equity so as to assure that the RAS is, and is seen to be equitable or fair.

As to the principles that are actually being proposed, it is difficult to evaluate them with the thoroughness appropriate for such principles in the time given. Take, for example, the principle of efficiency. As proposed, this principle is very prescriptive and does not allow for the possibility of a conflict with other principles, such as equity. Would it really be fair to have resources allocated solely on the basis of delivering "the most transformational impacts" (even if we know how to measure such impacts)? Economic theory tells us that in the context of mitigation funding, the most efficient use of Fund resources would be through the sort of competitive Quantity Performance mechanisms envisaged in [1] (see Appendix 1). However, as [1] also demonstrates: it would not be fair to allocate mitigation funding only by way of such competitive transactions.

Recommendation: If such guiding principles have to be adopted at all, then they will have to be discussed in more detail than will be possible during the meeting. The best way forward would be to delegate this to an ad-hoc Expert Working Group (of Board members/alternates and independent experts). In any case, Equity has to be brought in as a guiding principle.

III. Relevance of the resource allocation systems of other multilateral funds

13. **Five dimensions of applicability.** The RASs of other multilateral funds have been built to respond to the specific purpose and the guiding principles of the respective fund. There are five key dimensions that are important in assessing the relevance or applicability of these systems to the Fund: age, size, periodicity of funding, focus and role of the private sector.

It is not obvious why the five listed 'dimensions' are meant to be important in assessing the applicability of an RAS. Take the case of:

14. **Age of fund.** [...] Once established, multilateral funds generally want to get operational as soon as possible, and often transition to more permanent processes and systems as their full business model matures.

This may well be true, but it does not mean that a new fund cannot apply processes and systems that have matured elsewhere, or even new ones that are devised in response to lessons learned elsewhere.

IV. Building blocks of a resource allocation system

4.1 Tiers

21. In a single-tier system, all proposed activities meeting specified selection criteria are approved contingent on resource availability. They are used by small funds (Adaptation Fund, LDCF, and SCCF) with a single area of focus (e.g. adaptation). It is the simplest system to set up. All of the larger funds have more than one tier. Tiers are used to direct specific proportions of resources to designated areas (theme, countries or groups of countries). Proportions can be negotiated or based on pre-defined rules.

As mentioned in Section II, the paper treats project selection as a 'tier' of RASs. In light of this, it is factually incorrect in its assertion that the funds referred to have a 'single tier' RAS, for they all have country caps.

4.4 Rules for country-based allocation

31. [...] Formula-based allocations to a country are based on two factors: country's needs and country's performance (results).

This assumes, as explicitly stated in paragraph 38, that formulaic country allocations inevitably involve a performance component. This is simply not the case, as exemplified by the Adaptation Fund and the LDCF which both have a simple flat per country allocation with no reference to performance indicators (see also [2] for another, more complex example).

32. **Country's needs** often include two components –a measure of the overall scale of the problem and the intensity of the problem. Country's needs in multilateral funds focus on general development and are typically based on the scale (often measured by population) and the

intensity of need (often measured by per capita gross national income (GNI)). Theme-based multilateral funds measure needs based on their specific areas of focus.

Whether or not the 'base-component' of such allocations − that is to say the component that is modified by the performance parameters − can generally be identified as referring to 'needs' is debatable. In the case of the GEF RAF, for example, this base-component is given by *Climate Change Benefit Index* which is determined by the country-wide carbon emissions and a factor reflecting past relative changes in carbon intensity of GDP. It is not clear how this could be interpreted as reflecting a country's 'needs'. What it is meant to reflect is the potential for cost efficient mitigation.

However, the paragraph mirrors exactly some of the findings in [2] with regards to lessons learned from fiscal transfer mechanism for adaptation funding, namely that one simple way of allocating such funds would be in terms of the number of people exposed to climate change impacts with the 'intensity of need' provided by vulnerability measures.

33. **Country's performance (results)** includes both forward looking indicators of the quality of policies and institutions that constitute the enabling environment for success and backward-looking indicators of effective resource use, such as past portfolio performance. By linking future allocations to measures of current performance, the RASs of other multilateral funds incentivize countries to perform better. Chapter V provides a detailed discussion of how these systems incorporate results.

34. **Country's allocations.** Country's needs and results are measured by an aggregate index computed in an agreed manner and a set of indictors. Allocation scores are computed for each country based on an agreed formula that combines the indices. The score of a country relative to that of all other countries determines the share of the available resources allocated to the country. [...].

Appendix 2 highlights some serious flaws in the current practice of incorporating performance indicators into country resource allocation formulae. These will have to be avoided in designing a RAS for the GCF.

36. **Setting up a new system.** Establishing a new country-based allocation system is an iterative process between the development team and the Board that can take several years based on the recent examples of the GEF and the Global Fund. Full disclosure of the allocation process and the scoring of performance is now accepted practice at the funds, adding to the costs of operating such a system.

It is true that setting up an RAS has proven to be time-consuming, not least because lessons had to be learned of what to avoid. But many of these lessons have been learned and can be applied, which means that the process of setting up the GCF RAS could be considerably quicker than the examples quoted.

V. Incorporating results and addressing vulnerable countries' needs

5.1 Incorporation of results in the country-based RASs

38. Country-based allocation systems are commonly also referred to as "performance-based allocation" (PBA or PBAS), due to the special emphasis they place on the performance of countries. These RASs provide incentives to countries to deliver results through the use of backward and forward-looking indicators in their allocation formulas.

39. **Portfolio results.**

40. **Quality of policies and institutions.**

41. **Governance.**

44. **Results in project or activity-based allocation systems.** Multilateral funds that use project or activity-based allocation systems use interim evaluations of the approved proposal decide whether to fund subsequent phases of the same proposed activity (e.g. the Global Fund). They,

however, have limited influence in the allocation of resources to additional proposals the same country. [...]

As mentioned above, the claim that country allocation systems are the same as performance based ones is simply incorrect. It is also worth noting that of the four listed indicator categories, only the first three are related to country performance. The project or activity performance indicators referred to in paragraph 44 can be used to incentivise project or activity implementers. They do not pertain to the country level. This illustrates why it may not be useful to mix up (country/thematic) resource allocation with project cycle disbursements, as proposed in the background paper.

5.2 Addressing the needs of particularly vulnerable countries

45. Many multilateral funds have developed mechanisms to address the needs of particularly vulnerable countries. Some of these include the following:

(a) **Set-asides.** A pool of funds could be set aside for access only by certain countries (e.g. least developed countries (LDCs), small island developing States (SIDS) or African States);

(b) **Changing formula weight.** In a country-based allocation system, the effective weight of scale variables, such as population, can be reduced relative to the country's performance variables.[10] This increases the allocations for small countries that have good performance scores on policies and institutions;

[10] The Caribbean Development Bank uses the logarithmic value of "population" in its allocation formula, which has essentially the same effect on allocations as giving a small weight to population.

(c) **Introducing a vulnerability indicator in the formula.** A "vulnerability" indicator could be included in the allocation formula. This would benefit those countries that, on average, experience a high vulnerability to climate change and incidence of natural disasters. [...]; and

(d) **Improving access terms.** Support to particularly vulnerable countries could be provided in preferential terms (e.g. share of grants, terms of grant, degree of concessionality).

Of the options discussed, the least desirable from a point of view of transparency is to manipulate the formula, in particular by introducing some arbitrary function (logarithm) of the parameters that are meant to determine the 'needs' of countries. Moreover, to use a numerical parameter such as a vulnerability index simply to give special recognition to vulnerable countries over and above the way these vulnerabilities may be used in determining country needs would also be quite problematic. If there is seen to be a need for a special treatment of a group of countries, then the best way do deal with that is to introduce a separate dedicated pot (budget line), i.e. option (a)

VII. Next steps

50. Based on the Board's decision on the guiding principles for the RAS and guidance on the Fund's initial RAS model, the Secretariat will develop a detailed initial allocation framework for the Fund. To be fully operational, the RAS developed under any of the Options highlighted above will need to be complemented with the development and adoption of review criteria for activities and approval processes. In addition, the Secretariat will need to develop options for determining the appropriate balance of resources between themes.

As mentioned in the Recommendations to Section II, the proposed guiding principles are in need of careful consideration before they can be adopted. Indeed, the issue of resource allocation is both politically and technically difficult to a degree which the Secretariat should really not be burdened with. The most appropriate way forward is to form an (ad-hoc) ***Expert Working Group/Panel*** of Board members/alternates and independent experts to take charge of designing options of RASs for consideration by the Board.

Appendix 1. Quantity Performance Payment by Results: Executive Summary

On 28 June 2013 the Green Climate Fund (GCF) Board decided to consider at its first meeting in 2014 additional modalities that further enhance direct access, including through funding entities with a view to enhancing country ownership of projects and programs. This paper addresses the question of whether a certain type of funding mechanisms, known as Quantity Performance Payments (QPPs), could be used to fund mitigation activities in developing countries in the context of what has become known as 'enhanced direct access' through (national or regional) funding entities.

QPP is about rewarding mitigation performance measured in terms of some (physical) quantity. As part of a wider set of support windows, it could be an effective way for the GCF to meet its objectives of achieving climate change mitigation at scale, while providing enhanced direct access. It warrants further exploration by the GCF.

The paper starts with an introduction to the Green Climate Fund and enhanced direct access and continues with an overview of concepts and classifications regarding Quantity Performance (QP) instruments. It then turns to describe in detail the main design options and issues regarding QPPs, in particular the issue of resource allocation and four core elements of QPP transactions: namely counterparty selection, definition of results, price setting, and the setting of transaction quantities.

There are different ways in which these features can be determined, transaction by transaction. For example, counterparties and price could be determined competitively through auctions, or they could be set through negotiation on a first-come-first served basis, or by using a standard formula. Similarly QPP transactions may be micro in structure (in other words, they could be structured as the aggregation of performance measured in smaller, decentralized activities, perhaps led by the private or third sector) or macro (rewarding performance measured at a national, sub-national, or sectoral level). The way in which these elements are determined fundamentally defines the nature of a QPP instrument. The GCF will have to develop a view on the design features that are most suitable for its purposes.

This paper considers some early experiments and conceptualizations of using QP instruments at a macro- and a micro-level. Examples of the former, discussed in this paper, are the Norwegian International Forest Climate Initiative (NICFI), the Energy+ programme, and a scheme to reward accelerated transition pathways proposed by the Center for Global Development. The Global Energy Transfer Feed-in Tariffs (GET FiT) program and a proposal for a Clean Development Mechanism (CDM) Stabilization/Capacity Fund are examined as examples of QP models involving micro-level results. This Section concludes that all these examples provide useful starting points, but none of them yet offers a fully operational approach to enhanced direct access.

The paper then carries out an evaluation of QP instruments in the context of enhanced direct access, with respect to three key objectives of the GCF, namely, to promote a paradigm shift towards low-emission and climate-resilient development pathways, to achieve economic efficiency in directly securing emission reductions at cost, and to support equity in the distribution of resources. Based on this evaluation, the paper concludes that enhanced QPPs can be used in conformity with these objectives, provided they are used as a complement to other funding instruments. Finally, the paper puts forward two enhanced models − building on the example of the NICFI and the idea of a CDM Capacity Fund − as illustrations of how enhanced QPPs could be structured in the context of macro- or micro-level results, and with competitive or standardized transactions.

Appendix 2. The IDA Performance-Based Allocation System

The IDA country allocation for country *i* is given by a flat Base Allocation (BA) of SDR1.1m plus a Performance Based Allocation

$$\mathrm{IDA}_i = \mathrm{BA} + \mathrm{PBA}_i$$

IDA Country Performance Ratings (CPR)

The IDA *Performance Based Allocation* uses the IDA *Country Performance Ratings* (CPR) which themselves are based on the World Bank *Country Policy and Institutional Assessment* (CPIA) which has 16 criteria grouped in four clusters:

A. Economic Management

1. Macroeconomic Management; 2. Fiscal Policy; 3. Debt Policy

B. Structural Policies

4. Trade; 5. Financial Sector; 6. Business Regulatory Environment

C. Policies for Social Inclusion/Equity

7. Gender Equality; 8. Equity of Public Resource Use; 9. Building Human Resources; 10. Social Protection and Labour; 11. Policies and Institutions for Environmental Sustainability

D. Public Sector Management and Institutions

12. Property Rights and Rule-based Governance; 13. Quality of Budgetary and Financial Management; 14. Efficiency of Revenue Mobilization; 15. Quality of Public Administration; 16. Transparency, Accountability, and Corruption in the Public Sector

$$\mathrm{CPR} = 0.24 \cdot \mathrm{CPIA}_{A-C} + 0.68 \cdot \mathrm{CPIA}_{D} + 0.08 \cdot \mathrm{ARPP}$$

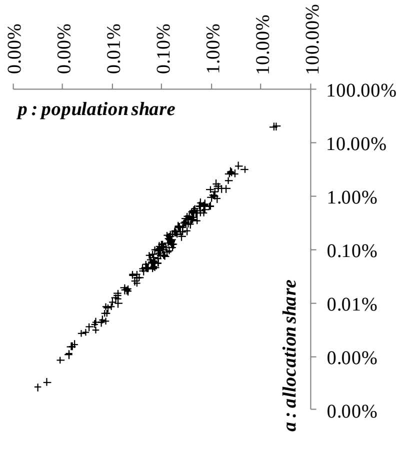
with ARPP = World Bank *Annual Report on Portfolio Performance* index

The IDA Country Performance Ratings are thus dominated by public sector management performance

IDA Performance Based Allocation (PBA)

The IDA performance Based Allocation is defined in terms of the country s CPR, its population and its GNI/cap:

$$PBA_i \approx (\mathrm{CPR}_i)^5 \times population_i \times (\mathrm{GNI}_i/\mathrm{cap})^{-0.125}$$



The GNI/cap factor is meant to make the allocation more progressive:

$$population_i \times (\mathrm{GNI}_i/\mathrm{cap})^{-0.125} = population_i \times \frac{1}{(\mathrm{GNI}_i/\mathrm{cap})^{0.125}}$$

("first-order allocation")

However, the exponent of −0.125 is so small that the effect is hardly noticeable (as illustrated in Figure 1. The IDA Performance Based Allocation is hence essentially the public sector management assessment index (to the power of 5!) times the population of the country.

The scale-dependence of the IDA Performance Based Allocation

Apart from the fact that the progressivity factor is extremely limited, the formulation of the IDA Performance Based Allocation has fundamental flaw, namely the fact that calculated shares depend on the choice of numerical scale used in turning the relevant rankings into indices. In the absence of the relevant CPIA rankings, this can be illustrated with a simplified model, given by

$$PBA_i^* \approx PR_i \times population_i \times (\mathrm{GNI}_i/\mathrm{cap})^{-0.125}$$

With an ordinal Performance Rating scale

$$PR_i \in \{A, B, C, D, E, F\}$$

Table 1 illustrates how in this model the shares allocated to India vary depending on how one chooses to numerically interpret this ordinal scale.

Table 1. Scale Dependence of the IDA PBA-type methodologies

	Numerical Representations of the Performance Scale						***PBA*-Share***
Scenario	F	E	D	C	B	A	India
First-order Allocation	n/a						46%
1. Everyone the same	any numerical representation						46%
2. India E, everyone else F	1	2	3	4	5	6	96%
3. India A, everyone else B							
(i)	1	2	3	4	5	6	68%
(ii)	0	1	2	3	4	5	72%
(iii)	5	6	7	8	9	10	59%
(iv)	95	96	97	98	99	100	47%

More on this in Benito Müller, *Performance-based formulaic resource allocation − A cautionary tale: Some Lessons for the Green Climate Fund from multilateral funding*, Oxford energy and Environment Brief, forthcoming (will be available with the other publications on

http://www.oxfordclimatepolicy.org/publications/mueller.shtml