Annex 31: Construction Guidelines

Introduction

Red een Kind is focused on the empowerment of families and communities by providing these groups with the skills they need to effect change for vulnerable children in their own communities. Key characteristics of this approach are strengthening of local capacity, use of local resources and participation of the community leading to local ownership. These characteristics therefore also serve as guiding principles for activities such as infrastructure projects.

The ultimate goal is that the children, their families and the communities as a whole will experience long term impact from the infrastructural initiatives. However to allow this to happen it is important that the right process is followed accompanied with careful planning, monitoring, evaluation and learning. Therefore this document provides some general guiding steps for a community participative construction process. First a narrative explanation is given followed by an overview of the different steps in overview table.

Within the programs infrastructural projects will especially be used for education construction activities. However these guidelines could also serve as other construction activities in the programmes. The applicability of the guidelines for non- school facilities will for a large part depend on the complexity of the construction and the ownership of the facilities.

Although the document focuses especially on the role of the community in the construction process of great importance is also the role of the government as it has a mandate in regards to the provision of these services. Therefore these guidelines will focus on the participation of the community in construction initiatives as well as the interaction with the government in this process.

The need for community participation in construction

Ownership of infrastructure construction initiatives is crucial for long term sustainable impact of the initiatives. Ownership among the various stakeholders including the community and the local government. To allow real ownership to emerge it is important that meaningful participation of the stakeholders takes place. Meaningful participation not just contributes towards sustainability but also more efficient and effective infrastructural initiatives. In education development projects strong community-school partnerships have been noted to have the following benefits:[1]

- Ownership and sustainability of projects
- Utilization of the project outputs by the intended groups (include hard to reach such as girl children of historically marginalized groups)
- Maximizing and recognizing existing local resources thus
- Building the capacity of communities to identify and address their own needs
- Increased accountability as parents become more involved in school governance

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[1] Epstein, 1995 and 1997

- Improved learning environment-when parents understand the importance of their role in the education their children they are likely to make efforts to improve children readiness to come to school and support with homework.

Implementation experience showed that the key factor in the mobilization of community participation was local level leadership. The following lessons learnt were recorded:
- the need to spend a great deal of time and effort in preparing community participation activities;
- the necessity to properly time project launch in order to ensure maximum community participation and the necessity to continuously maintain this motivation;
- the need to pay communities and local contractors directly and not to pass through an intermediary such as a local government authority;
- the need to overcome the difficulty that the Ministry of education has in effectively communicating and controlling activities at the district and community level.

The participation in the construction process
Every (school) construction initiative is different and its circumstances unique. However, the process for building or rehabilitating with the community in collaboration with the government follows a fairly consistent pattern. This pattern can be described along the lines of the project cycle management process including the assessment, planning, implementation/monitoring and evaluation stage (see below overview table of the different steps: Process Participatory Community Construction Initiatives).

Although community participation in infrastructure programs has immense benefits, it is not free from challenges. To begin with, the community is not a homogeneous group and not all groups are willingly to be involved nor have the same capacity to participate in construction related projects. It is important to realize that community participation is a deliberate effort and will take commitment and resources from development planners to be successful. This calls for strategies that are carefully examined and tested to ensure that participation yields the expected results.

Strategies for promoting community participation in (school) infrastructure development
The following strategies/practices may aid in empowering communities to have meaningful involvement in (school) construction programmes.

Understanding the Context (see step 1.1, 1.2, 2.1, 2.2 and 3.2 in the table)
As outlined above, no community is uniform; there is need to examine and understand the social, political, economic and religious environment where the (school) construction project is operating in. This can be done by using approaches such as the Participatory toolbox and Sustainable Livelihoods Analysis (SLA). Both contain tools that can provide detailed information on the construction project's operating environment. Ideally, before starting (school) construction these processes should have been completed.

The context analysis should also include assessments at meso (district) and macro (national) level of the government policies and plans with regards to the construction of schools or other

facilities. These plans do not only concern government - but also plans of major donors or other NGO's.

It is also important to understand the institutional set up in the community, i.e. the existence of a Parent Teacher Association (PTA) is often an entry point to the community. Such bodies would have different functions, for example in DRC it is common to find a school with more than 3 committees, though they have complementary tasks, others have a responsibility for school infrastructure development and community mobilisation than others. Institutional assessments beyond the school and education setting could involve analysing existing community structures such as local and church leadership arrangements these should be integrated as key stakeholders.

Some specific questions to understand existing organizations include

- **What kinds of school/parent/community structure(s) or organization(s) are found?**
- **Who can be members of these organizations?**
- **What are the criteria for membership?**
- **How are members chosen?**
- **What are the functions, responsibilities, and rights of these organizations?**
- **What, if anything, are they prohibited from doing?**
- **What is the nature of the laws and/or regulations which govern these organizations?**

Furthermore, the following questions are useful in understanding the actual nature and performance of the organizations in the community, beyond the mandated functions.

- **How do existing school/parent/community organizations participate in school affairs?**
- **What level of participation is actually achieved by such organizations?**
- **Does level of participation differ widely by region (rural-urban), by the social and economic class of pupils and their families, and between public and private schools?**
- **Does the Ministry simply assume these organizations exist, or does it actively seek to learn if they exist and what they do in terms of support and monitoring?**
- **Is there any attempt made in the Ministry's data gathering exercises to learn about the existence and activities of such organizations?**

Assess community resources (see table step 3.1. and 3.2)

It is necessary to understand both the willingness and resources available in the community and realizing that partnerships with communities does not mean all parties bring the same resources. Community participation in education requires communities to have the following competences; institutional capability, technical capability, financial capability, and political capability and natural resource capability as illustrated in the box below.

While using the participatory toolbox community make maps that show existing natural resource maps and such information would be crucial for determining what the community can contribute towards construction work. Different villages based on their natural resource can contribute different things and items. It is important to realize the differences that exist in access to certain communal resources as sands and stones needed for construction.

When conducting SLA and participatory toolbox, community wealth ranking is often done. This information can be used to determine how households contributions based on their wealth rank where needed. Very poor households may make contributions in kind i.e. offering labour within the school. However, this should be a decision made by these households not imposed by other groups or by the planners

Planning school construction with and for the community (see table step 2.1, 2.2)

The need for building or rehabilitating the school should be identified by the community including the children, PTA, parents, local leaders and the school administration (see step 1.1). Information collected during the score card provides baseline information about the conditions of the school, total number of children, classrooms numbers and quality, water and sanitation. During action planning, the need for infrastructure development could be identified; however this meeting is only for small number of the community. It is important to gather all community members share findings of the score card and action plan developed. The PTA and local leaders can assist in mobilizing parents and community for a school construction meeting. It is important to consult other stakeholders such as the government to assert if they see this as a priority, otherwise it would be difficult to guarantee their commitment in the process (step 2.1 and 2.2).

During planning meetings, communities should be actively involved in deciding how the schools will be constructed, where, by whom and what the community will contribute to the construction. Frequently, communities contribute labour for carrying water, sand or making the walls, while the NGO provides the roofing, cement, doors, windows and technical assistance. When considering community-initiated schools, it is important to consider the time frame for completion and quality of construction. Frequently, communities overestimate their resources and underestimate the constraints on their time.

Where the capacity of the PTA is very limited, it could be better to select a project steering committee composed of PTA members, parents, school head and local leaders. Often there will also be the need to contract a technical expert that provide support to the committee (table step 3.3, 3.4 and 3.5). This will especially be the case where communities have little experience with construction of buildings with bricks.

School/parent/community organizations/committees need to have certain knowledge, skills and attitudes to realize successful community participation in education. These include:

- An understanding of the rationale for greater participation of its potential advantages, and of its constrains and risks;
- Attitudes which encourage an open and transparent environment in the school and open channels of communication between the school and the community,
- Knowledge of local conditions which influence educational demand and achievement;
- School management skills (abilities to help define the goals, policies, programmes, and expectations of the school and the responsibilities and functions of each partner; to encourage shared, more participatory decision making with both teachers and school/community organizations; to plan, organize, conduct, and report on meetings; and to manage and account for government and community resources provided to the school);
- The ability to gain the trust of parents, NGOs, and other partners in the community, to communicate, collaborate, and build a consensus with them, and to animate them and encourage their involvement in the school;
- The ability to mobilize resources from the various interest groups and power centres in the community

Work through existing community structures (see table step 1.3)
Working through traditional structures increases the likelihood of community participation being sustainable. It helps focus on community priorities and ensures local ownership. For external actors working with communities, taking the time to identify community leadership and operational mechanisms is essential in building relationships and trust, through which partnerships can be formed.
Communities need guidance and support to take on new roles, whether self-initiated, or empowered to do so by NGOs. Guidance and frameworks help establish expectations and familiarise community members with concepts and roles that may be unfamiliar (step 3.8)

Keep expectations realistic (see table step 3.4)
Communities often play a pivotal role in ensuring the continuity of use of constructed facilities after project phase out. However, if communities have had prolonged conflict or disaster, many initiatives become increasingly dependent on external actors to provide resources and to sustain community motivation. To be truly effective and sustainable, construction interventions need to recognise stakeholders' contributions, but also their limitations, so that expectations are appropriately managed.

Community based procurement mechanisms (see table step 4.1 and 4.2)
 There are diverse procurement options including; (a) using central Ministries of Education (b) through Project Implementation Units, Contract Management Agencies or NGOs (c) by decentralisation of responsibility to local government and (d) use of community management. It is significant to note that procurement methods have the single most impact on construction cost[2].

Evidence from many projects demonstrate that for primary school programs unit costs are significantly lower when small and medium sized contractors are used when compared to the use of larger national or international contractors. In Africa at least, the most effective approach in terms of cost has been where procurement has been delegated to schools and communities supported by the correct resources and technical assistance[3]

School construction led by NGOs often promotes community participation and reduces costs. NGOs can mobilize resources and generate innovative solutions to local problems. By 2000, the unit cost of a classroom in Guinea decreased from $13,500 to $7,600 through reliance on NGOs[4].

Community managed programs also have advantages in developmental terms because more local labour and materials will be used and more money will be retained in the local economy. Where schools and communities are involved and the process is well planned and effectively implemented, their ability to undertake similar projects in the future and the possibilities for building school management capacity are be increased

The clear definition of duties and responsibilities of all partners in a community-based project is vital to its success (table step 4.3 and 3.8).

Develop community capacity to maintain (school) infrastructure (see table step 1.3 and 3.6)
The failure to include maintenance of school infrastructure during the planning process has led to the deterioration and collapse of many classrooms and furniture. The design of the school will have consequence on future maintenance. Schools that use materials that are expensive and not locally available are likely to face challenges for maintenance. In many cases the community is not able to provide sufficient skills or the funds available to make repairs for such buildings possible.

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[2] Association for the Development of Learning in Africa (ADEA) (2003). The Challenge of Learning - Improving the Quality of Basic Education in Sub-Saharan Africa.

3 Michaelowa, K and Wechtler, A (2005). The Cost Effectiveness of Inputs in Primary Education

[4] Theunynck, S (2009). School Construction Strategies for Universal Primary Education in Africa: Should Communities be Empowered to Build their own Schools? World Bank, Washington DC

It may be necessary for community artisans to work alongside external technical support staff during the construction phase. During this process they will enhance their capacity to repair and sustain school infrastructure at the end of the project.

Maintenance will always require funds and this should be discussed during the planning phase i.e. the capacity of community members to mobilize funds to for maintenance functions

Quality of the construction (see table steps 4.4, 4.5 and 5)
To ensure facilities of good quality are built it is important that the construction process is monitored carefully. Use of the right design, where necessary working with technical experts and the monitoring of the construction on a regular basis can contribute towards qualitative good facilities. Also formal end of construction evaluations as well as post construction checks should be included in the plans. It is important that formal handover agreements take place between the partner and the community and/or the local government if the partner organizations has been one of the financial supporters of the construction initiative.

Overview table: Process Participatory Community Construction Initiatives:		
1. Construction Initiation process:		**Comment**
1.1	*Community planning*: One of the first steps is to determine if the construction of a school, health center, water supply system or other construction is a priority of the community. This means that all groups in the community including marginalized groups such as women and children agree that the construction is a priority.	The Participatory Toobox or Sustainable Livelihood Assessment (SLA) can assist communities to determine its priorities
1.2	*Construction committee*: To ensure community ownership of the construction activities the planning of construction activities should be done by local capacity. It is possible that the community sets up a small committee that investigates the possibilities for having the construction take place. If it concerns a school construction it is possible that the committee consists of members of the Parent Teacher Association (PTA). If it concerns a water construction a water management committee could be set up.	It is important that the committee members represent all groups in the community (make sure there is a good mix of men and women). It is advisable to see what capacity already exists in the community
1.3	*Capacity building*: If the committee does not have experience with construction, some training on construction assessments, planning, monitoring and	It is important that the committee reports back to the community on a regular

	the functioning of the committee (roles and responsibilities) will have to be provided	basis on the progress of the construction
2.Assessment		
2.1	*Government plans*: A next steps is to determine how the government perceives the need for the construction (The community meets with the government and discusses these issues).	Is the particular construction part of the local government plans? If yes how soon is the construction planned to take place. Has the government already budgeted for this construction
2.2	*Funding:* If the construction is in line with government plans/ policy but no budget is available for the middle or long term. Check if there are other actors that have plans to fund this kind of construction in the area.	Especially check with major donors such as the UN (UNICEF), World Bank and EU that often have country wide programs (the partner organization can assist with this assessment). Often the government is aware of these plans.
3.Planning		
3.1	*Local support*: If the government supports the construction and there are no other stakeholders that have plans to construct the communities discuss what they can do themselves in collaboration with the local government education department	Participatory toolbox or SLA tools can be used to assess available resources in the community and the area.
3.2	*Construction guidelines*: It is important that discussions take place with the government (education) department about the design.	Check if the government has mandatory designs or requirements for the construction. Check if the government also has a support department with technical expertise to

		support a particular type of construction.
3.3	*Contributions:* The community construction committee possibly together with a technician of the government or a technician contracted by the partner prepare a plan for construction. It is important that the community describes its own contribution towards the construction (this could be in kind, labor, making space available for storing stocks etc) and the government describes in what way it will contribute towards the construction. This could possibly be technical support during the construction assisting the community to do the construction.	Make sure there are written agreements in the community and with the government about the land to be used.
3.4	*External technical support*: If the government does not have the technical expertise it will be necessary to go through a bidding process in which an individual(s) or companies are invited to provide the technical support. This bidding process should be managed by the partner organization with the presence of the government and community committee representation	A 1 year guarantee is included to make sure that if there are construction problems one year after completion of the construction this is corrected
3.5	*Environmental impact assessment*: An environmental impact assessment is done to avoid negative impact of the construction on the environment	This can done by the involved stakeholders or by an external expert. (Guidelines are available)
3.6	*Long term maintenance*: The long term maintenance is discussed at an early stage between the government and the community and agreements (Village financial contributions, government contributions etc). Contributions of villagers can be determined based on household capacity.	Agreement is prepared and signed. Before the construction takes place also agreements need to be made on the long term use of the construction. Issues to be considered are: who will provide teachers, benches and education materials. Who is going to be responsible for the long term maintenance.

3.7	*Community ownership*: Construction plans are discussed with the wider community and community agrees with the plans.	All sections of the community have the opportunity to comment on the plans
3.8	*Agreements* are made regarding the contributions of the different stakeholders towards the plans (the community contribution, the government contribution, the technical support and the donor contribution) before the actual construction takes place	These agreements also include the long term maintenance mentioned in 3.6
4.Implementation		
4.1	*Procurement of materials*: Agree on who will be responsible for the procurement of materials.	Be aware procurements are sensitive to corruption as the person(s) involved often get a slice of the pie from shops. Therefore it is advisable that at least three quotations are collected from shops before materials are procured.
4.2	*Stock control*: Committee members check on the quality and quantity of the materials together with the technical expert as they are procured and used.	The partner makes sure the necessary systems are in place
4.3	*Supervision*: The committee will coordinate and supervise the involvement of community members in the construction.	Where necessary this will be done with the support of a technician (see 3.4)
4.4	*Monitoring*: The committee together with the government (including technical expert) and the partner organization check the progress of the construction (monitor) at certain earlier set intervals. A report is prepared on the progress of the construction for future reference.	In case there are irregularities in the construction process the committee will address them and the partner

		organization will be informed.
4.5	*Final inspection*: The construction process only comes to a close once all stakeholders and the community have evaluated the final construction and agree that it has been build according to expected standards	For the final inspection an evaluation should take place against certain construction standards. Often the government has a technical expert. If not available an external person needs to be hired to do the evaluation
5.Post construction activities		
5.1	*Full use:* The process is not completed before the facility can and is in full use. In the case of a school construction the provision of teachers, benches, educational materials etc need to be checked.	Committee will have to follow up with the government and other stakeholders that have committed to contribute
5.2	*Maintenance committees* are set up and trained and where necessary supported in their roles and responsibilities.	This could be part of the role of the PTA or a subcommittee of the PTA
5.3	*Hand-over*: An official hand-over takes place to both the government and the community to ensure long term ownership	If no official hand-over takes place the donor might be considered to be the owner and responsible for maintenance.
5.4	*Post construction inspections*: After half a year and again after a year a review takes place of the construction and possible technical problems are corrected	If there are irregularities, and a company or technician was contracted to ensure quality of the construction, the company should correct the problems
5.5	*Ongoing support:* The maintenance committee receives support for at least up to one year	