



Operational Research Project Management, Experiences, Challenges and Lessons Learnt

A Case Study Of The East Africa Public Health Laboratories Networking Project

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Summary

INTRODUCTION

Effective project management revolves around Strategic Management. Logistics seem simple and straight forward but, often the role it plays in scientific undertakings is overlooked. It is usually assumed that research starts and ends in the laboratory. It is a fact that, for research activities to be successful, it requires exceptional planning to ensure that, resources are available as per the approved work-plan. This entails determination of what, when, who, why and how it is to be done. Recent studies indicate that, logistics-related activities' impact on research undertakings significantly.

OBJECTIVE

To document the project management experiences and lessons learnt in coordinating and implementation of East Africa Public Health Laboratories Networking Project –Operational Research (EAPHLNP-OR) activities in five East African countries, namely: Kenya, Rwanda, Burundi, Uganda and Tanzania.

METHODOLOGY

The operational research component of the EAPHLNP, KEMRI established an OR Secretariat to coordinate the project activities in Kenya and provide leadership to regional principal investigators. In consultation with the project Secretariat, the role of the administrator involved Work plan and budget preparation, planning, organizing, communicating, coordinating local and regional meetings, linking KEMRI research team with the study site (Hospital Administration) and Research Teams in the various counties. The site Teams obtained informed consent, recruited respondents, collected specimens, analyzed the specimens and shipped a portion of the same together with the results to KEMRI.

KEY ACTIVITIES OF THE PROJECT

Managing financial aspects (budget and financial report preparations), logistical coordination, and procurement of training materials, organizing for meeting venues, taking minutes, travel arrangements and participation in scientific report writing. Control mechanism such as dairies, ledger books, work plan charts and schedules, managing and monitoring the progress of the project activities.



LESSONS LEARNT & CHALLENGES

Interpersonal skills were essential at all stages of the project. The critical stage was the forming, storming, and norming stages. Here, group dynamics and conflicts took center stage. This threatened to stall the OR Project. Timely and constant communication with the study site coordinators, prioritization of scheduled project activities, was essential. Ensuring all parties are kept informed on the progress of the OR activities. The information in user-friendly format dairies and schedules provided the necessary feedback at administrative level, on project performance and at research findings. Key challenges included fluctuating funding, group dynamic conflicts and staff transfers.

DISCUSSION

EAPHLNP-OR was a Seven (7) years project undertaking, which for effective management involved understanding of the operating environment, strategic planning for short and long term goals, constant communication, review of priorities, documentation and practise of good interpersonal skills.

CONCLUSION

Successful project management in OR required an administrator to coordinate the utilization of the available resources both capital and human. This is the second supplement in this issue only aspects on findings from TB and Enteric studies done in Kenya have been addressed. Three regional policy briefs on TB Enteric and malaria have been included.

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Introduction

Successful project management revolves around a cycle of planning, implementation, coordination, constant monitoring and evaluation of the scheduled activities.

According to [1] there is no clear definition of project success. Most studies in this discipline do not have measurable constructs of project success. Different scholars are trying to prepare models that attempt to develop a framework of project success constructs.

A number of empirical studies have investigated the nature of “Project Success” as either uni-dimensional or multi-dimensional constructs geared towards meeting set goals or objectives [1].

Documentation of structures and processes are essential components that are employed during the planning and execution stages ensuring the project attains its desired goals. This involves establishing which

ideas work in the real world, learning from experiences and transfer effective project management skills to other practitioners [2].

Clear information provision on project outcomes and sharing of project experiences, helps other practitioners address their own particular and unique situations while executing project management[1].

In addition, it allows knowledge - flow and provide an understanding of what tasks can be refined over a period of time [3].

There is a general assumption that scientific research projects usually start and end in the laboratory. Overlooking the fact that research activities be successful, exceptional planning which involves determination of what, when, who, why and how it is to be done, is essential.



Project managers require practice skills in planning, communication, coordination, constant evaluation and report writing in-order to manage a project from inception and track it upto a successful completion.

Experiences are those events that were encountered by project management team and benefits perceived to have been gained during the project period. The obstacles that contribute to hinderance in smooth implementation of the studies are documented as 'challenges'. While the new knowledge and skills obtained during the implementation of OR activities are 'lessons learnt' [4].

The East Africa Public Health Laboratory Networking – Operational Research (EAPHLNP-OR) Project was a multi-site, multi-disciplinary regional project spread over five East African countries, namely Kenya, Tanzania, Uganda, Rwanda and Burundi [5].

In November 2010, the then Ministry of Public Health and Sanitation (MoPHS) identified the Kenya Medical Research Institute (KEMRI) to take the lead role in the coordination of Operational Research (OR) activities in this regional project.

KEMRI established an OR Secretariat to coordinate the project activities in Kenya and provide leadership to regional principal investigators. Three unrelated thematic researches namely Enteric, Malaria, and Tuberculosis protocols, were developed by the OR secretariat and adopted regionally.

The rolling-out of actual OR activities in Kenya started in February 2013. It is against this background that the OR Secretariat envisaged that, for the smooth running of research activities, a project administrator was required.

This study sought to document the project management experiences, challenges and lessons learnt in coordinating Local / Regional Operational Research activities over a five (5) years period.

Description / Methodology

At the initial stage, a number of consultative meetings were held. The meetings consisted of Regional and In-Country OR TECHNICAL WORKING GROUPS (OR-TWG). This allowed for consultations among the research partners and field teams.

The key task was planning how to host these meetings. Most specifically, budget preparation, logistical coordination for the OR TWG participants both regional and In-Country, arranging for meeting venues, organizing support staff, taking minutes, and report writing.

Additional tasks for regional workshops included processing of travel documents, booking of flights and accommodation for delegates.

Frequent secretariat review meetings were held as part of overall project management aspects. These routine meetings offered opportunities for consultation within other OR secretariat members.

Project Administrative Aspects

Project administrative aspects involved work plan and budget preparation, planning, organizing meetings both local and regional, communication, budget and scientific report preparations.

OR Secretariat conducted two types of trainings (Research Methodology and Benchmarking Educational Trips) as part of capacity building activities.

Research Methodology and Local Trainings were carried out in the year 2013 with an aim of equipping selected site staff with the necessary research skills. In addition, annual skills development workshops and benchmarking educational trips were conducted for the participating site laboratory staff.

The Role of Project Management Project Coordination Activities

Project coordination activities involved co-ordination of multi - disciplinary scientific teams, preparation of financial reports, responding to audit queries, coordinating the preparation and printing of the newsletters.

Other tasks include booking of meeting venues and coordination of accommodation for delegates during regional meetings, as well as assisting in preparation of workshops reports.

Major important project activities revolved around scheduling, coordinating, regular supervision monitoring and evaluation at the study sites organized in consultation with the OR Secretariat.



Monitoring and Evaluation (M&E)

The monitoring and evaluation (M&E) site visits were conducted quarterly in collaboration with the M&E team. This offered an opportunity to check on how the field teams were adhering to the protocol requirements in collection of samples, packing and transporting. Likewise, discuss any challenge being experienced for prompt rectification.

In consultation with the team leader and M&E members, administrative tasks included planning, organizing, coordinating site visits by research teams to the study sites, linking them with the Hospitals' Management and the operational Laboratories.

Travel arrangements to the study sites involved organizing transportation and accommodation for the OR secretariat.

Participation in dissemination of scientific findings was through publications in newsletters peer-reviewed journals, and regional bulletins.

Other aspects involved attending as well as hosting In-Country, regional and international scientific conferences to share the OR findings.

Apart from the usual logistical coordination, the project administrator, depending on the nature of the conference, participated in writing of scientific articles, newsletters, manuscripts and preparation of workshop financial reports.

Project control tools included:

- Dairies, Pens and Rulers
- Ledger books
- Workplan charts
- Schedules which are essential in capturing, Managing and monitoring the progress of the Research activities.

Findings / Outcome

The undertakings were unique and totally different from the routine administrative procedures.

Experiences

- It was observed that project conceptualization was structured in such a way that the field staff carried-

out the research as an extra activity alongside their routine tasks. This setup was unique and different from the usual research field practice.

- The site teams obtained informed consent and recruited patients, collected specimens, analyzed the specimen and shipped a portion of the same together with the results to KEMRI. Experiences of field site teams are described in a separate article appearing in this *Journal* [6]

- It was noted that the OR secretariat hosted Elven(11) video conferences with regional thematic principal investigators and OR coordinators as part of ensuring conformity to standardized operating procedures to deliver credible evidence.

- A number of workshops were organized annually to reflect on the OR performance and mitigate on any non-conformities identified to affect the research activities. This ensured some form of consistency in terms of generating results that could be regionally comparable.

- Formal and informal channels of communication was used to ensure all team members were kept informed. The choice of communication channel (Telephone Calls, Official Letters, Emails and Short-Message - Texting (sms)) was dictated by circumstances. SMS to Field Teams was the most commonly used.

Research Information Management

- This was critical towards keeping stakeholders informed. A total of three research newsletters, two scientific conference abstract books and supplementary issue in the *African Journal of Health Sciences (AJHS)* were produced as part of dissemination of research to targeted stakeholders.

- OR Secretariat used techniques to sustain field staff commitment to the project. Objectives involving motivating staff, recognizing and rewarding achievements were set.

- Some of the non - financial motivation initiatives used to ensure field staff participated actively included awarding trophies and certificates of achievements to outstanding sites. Invitation to attend,



present scientific abstracts and capacity building while organizing two benchmarking educational trips.

- Significant external environmental changes took place in the year 2013 when the health landscape in Kenya changed with decision making processes shifting from the central Ministry of Health to a devolved administrative unit.
- This affected the EAPHLNP-OR Project significantly as the participating public health hospitals and associated laboratories were placed under local regional County Government's jurisdiction.
- These external environmental changes necessitated the OR Secretariat to devise methods of remaining focused given that the new circumstances were beyond its control.
- The M&E teams provided the necessary feedback on how the project was progressing towards attainment of set targets. The outputs of the M&E exercises assisted in determining the progress and performance of all the three studies.

Challenges

- Three notable challenges were identified and documented during the project life cycle. They include fluctuating funding levels, group conflicts & dynamics and field staff transfers. This is illustrated in (*Figure 1*.)

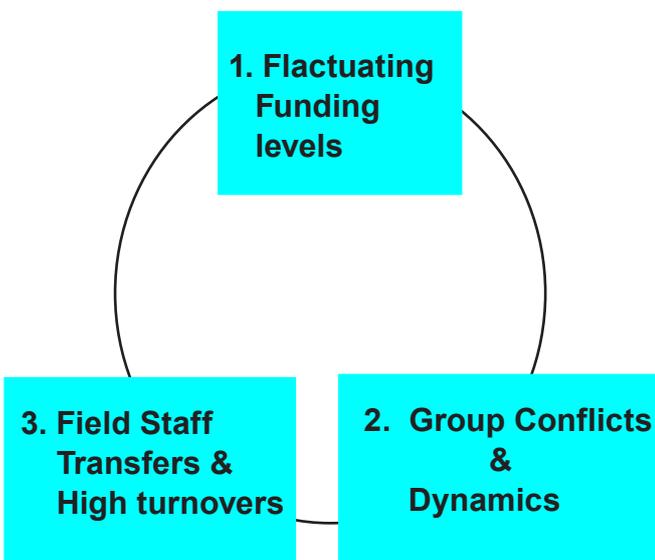


Figure 1: OR Project Management Challenges

- Fluctuating funding levels and delayed cash disbursement schedules from the Ministry of Health resulted to, constantly reviewing and prioritizing project activities.
- There were moments whereby group conflicts and dynamics took center stage and threatened to stall the OR Project. These phenomena occurred during various stages of the project lifecycle.
- At the forming stage, conflict centered on ideologies and execution plans between OR secretariat and regional TWGs.

During field visits, it was observed that some of the site personnel had site leadership challenges, poor communication and disagreements related to sharing of perceived project benefits.

At the norming stages, certain ground rules were established and documented for reference purposes. This ensured that the project moved on smoothly with minimal disruptions.

- High staff turn-overs and poor communication lead to poor project hand-over to the incoming staff.
- Laxity on part of the study site administration in overseeing daily OR operations slowed down research activities and required a lot of persuasion. This resulted to low numbers of samples collected, delayed shipment, and low study subject recruitments.

Lessons Learnt

Regular review of project plans, re-periodization and project scheduling of activities was critical towards achieving project goals.

- The Study facilitators implemented OR as part of routine activities which was made possible by periodic supervision and motivation by OR secretariat.
- There were turbulent periods caused by project operating environment. One such period was when the project leadership had no authority over the human resource at the participating sites, resulting into the use of influence without authority skills. This helped to retain the field teams on course and minimize any potential project drop-out at the sites.



- A project of this magnitude required constant consultation, communication on current activities and receiving feedback from the sites which is critical in assuring all teams are updated on realtime activities.

This process ensured that all stakeholders were provided with important project information. It also facilitated sharing of evaluation reports, scientific findings and following-up on assigned tasks.

- Interpersonal skills were essential in all stages of the project. Soft skills such as the art of persuasion, motivation and assurance at a personal level confirmed every OR member's efforts were appreciated and their contributions reflected in the decision making process.

Conclusion

The successful project management ensured that, available resources were prudently utilized and synchronized towards attainment of expected goals and delivery of quality outputs within acceptable timelines.

EAPHLNP-OR was a long term undertaking. Successful project management involve understanding the operating environment, short and long term goals, reviewing of priorities, constant communication, documentation and interpersonal skills. Focusing on ensuring all resources are available and synchronized towards the attainment of expected goals. Deliver quality outputs within acceptable timelines.

Successful project management in OR required an administrator to coordinate the utilization of the available resources both capital and human.

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