

40th WEDC International Conference, Loughborough, UK, 2017

**LOCAL ACTION WITH INTERNATIONAL COOPERATION TO IMPROVE AND
SUSTAIN WATER, SANITATION AND HYGIENE SERVICES**

**Case study on value for money assessment of a
UNICEF assisted WASH programme in Nepal**

S. Adhikari, A. P. Gautam, S. B. Dhakal & T. Ahmad (Nepal)

PAPER 2700

A value for money (VfM) tool was used to better understand the input to process and output to results chain, to enable evidence based programming and to improve performance in terms of economy, efficiency, equity, and effectiveness of UNICEF assisted WASH programme in Nepal. This was motivated by result based budget allocation, planning and monitoring approach to enhance result based management of WASH programme. The VfM tool used in the case study is mainly based on comparing Cost Performance Ratios for consecutive years of implementation. The recommendations of VfM study conducted in 2014 provided basis for improvement and maximizing results in 2015 and also led to improved VfM analysis in 2015. This was achieved through revisiting the physical targets, readjusting the unit cost and reviewing its partnership strategies. The performances and associated expenditure so far made substantiates good value for money.

Background

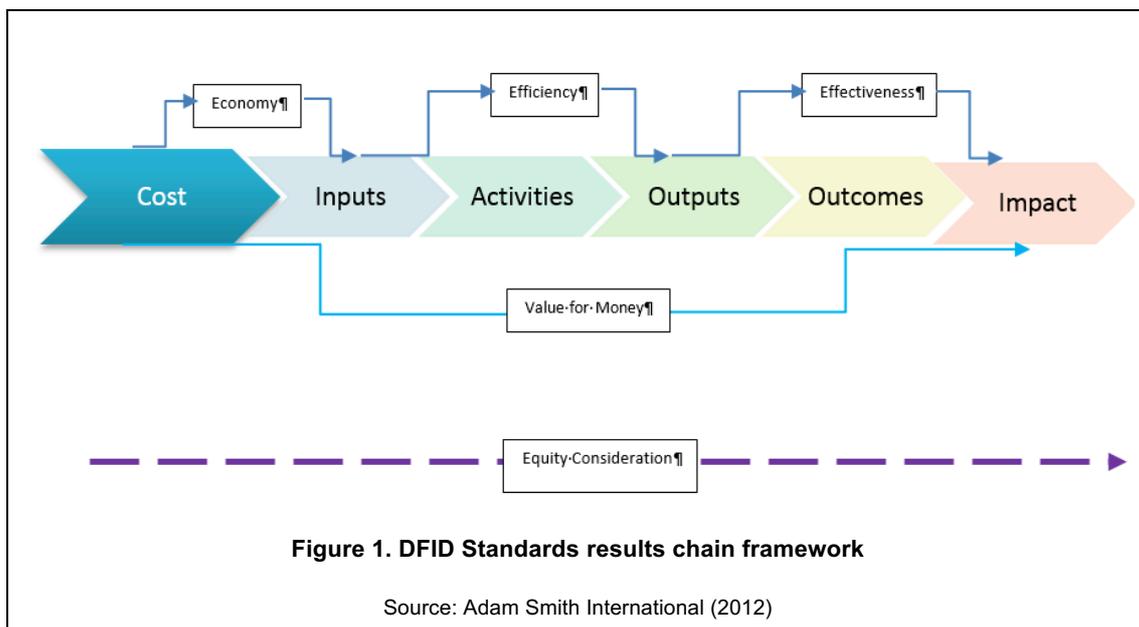
Survey results of Nepal Multiple Indicator Cluster Survey (NMICS) conducted in 2014 shows that 60 per cent of Nepalese households use non-shared improved sanitation facilities while 93% of households are using improved sources of drinking water (NMICS, 2014). These achievements are significant in taking Nepal closer to its national goal of universal water supply and sanitation coverage by 2017. However, water quality and functionality of the water supply system are the major issues. NMICS 2014 shows that 71% of water sources had E. coli contamination while at household level it was 82%. Data from Nepal Management Information Programme (NMIP) shows that only 25% of the water supply systems are functioning well while 40% requires either major repairs or rehabilitation due to poor operations and maintenance as well as lack of governance and because of recurring disasters (NMIP, 2014). Therefore achieving SDGs in this context would be a great challenge as this would require a robust financial planning and effective resource mobilization mechanism to implement the WASH Sector Development Plan 2016-30 which Nepal has already developed. Incorporating Value for Money (VfM) as one of the monitoring tool would greatly lead to efficiently and effectiveness. However, both at the sector and country level programmes, very few programmes have combined financial results and performance results in a way that can produce a complete picture on whether funds are completely directed towards achieving the intended goal. In this context, assessment on VfM of the Government of Nepal and UNICEF WASH Programme was undertaken as an example towards building a systematic, strategic and sustainable practice of generating evidences on cost and performance analysis. This papers will attempt to share the implication of this assessment and analysis to promote VfM as a viable management tool for enhancing organisational efficiency and accountability and generating results for each dollar spent.

What is Value for Money tool?

Under the Government of Nepal and UNICEF WASH Programmme, a VfM analysis was used as one of the performance management and financial management tools. This tool provided an opportunity to make sure that each dollar spent is directed towards achieving the desired result. The tool introduced by DFID in 2014

as part of Accelerating Sanitation and Water For All (ASWA) in off-track countries promulgated the definition of VfM as: “Value for Money is about maximising the impact of each (GB) Pound spent to improve poor people’s lives” (DFID, 2011). VfM is also considered as a striking balance between economy, efficiency and effectiveness.

Economic aspect of the analysis measures whether purchased inputs are of good quality and of right price. Efficiency measures whether inputs are well converted into outputs. Interventions implemented with maximum economy and efficiency also does not guarantee that output is contributing to the expected outcomes. Hence effectiveness measures how outputs are contributing to achieving the desired outcomes (DFID, 2011). While number of possible outcomes can be enumerated, likelihood of achieving the outcome can be calculated in terms of probability because agencies do not have full control over the outcomes as much as they have over outputs. The concept can be well understood from the DFID standards Results Chain Framework as shown below in Figure 1.



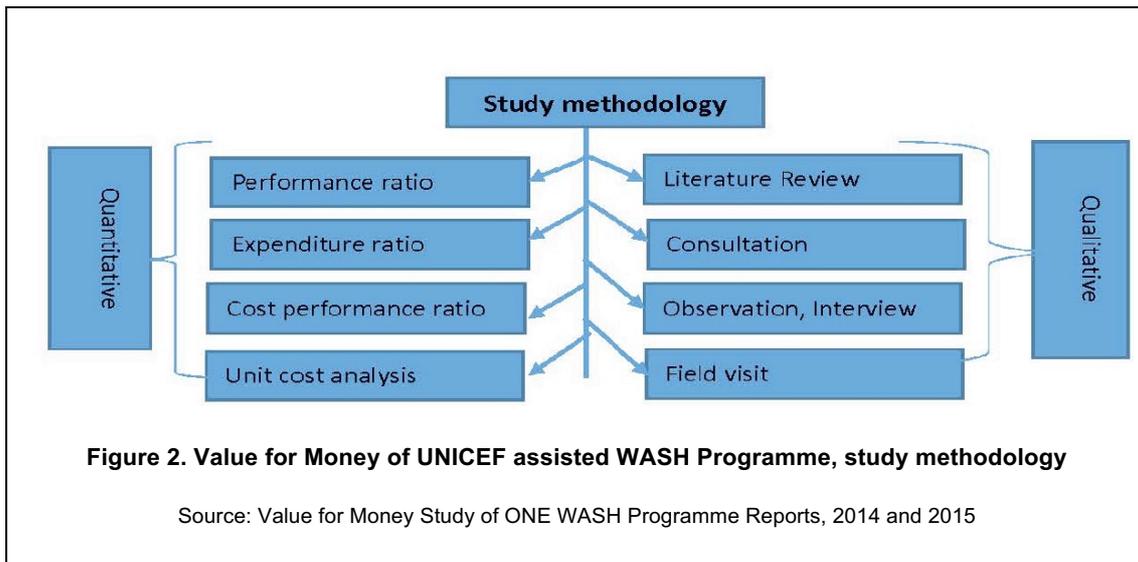
Purpose of the study

The main purpose of the study is to support the Government of Nepal and UNICEF WASH Programme with effective management of funds through VfM approach so as to reach increased number of beneficiaries with efficient and effective WASH services. Specific objectives for carrying out this VfM study are as follows:

1. Assess financial and performance data for UNICEF assisted WASH programme,
2. Produce an analysis into the Cost Performance Ratio and provide a clear picture on how fund is being utilized to achieve targeted results,
3. Provide an overview on how VfM supported result based monitoring and evaluation system, result based management and result based budget allocation for WASH programme, and
4. Encourage WASH programme implementing partners to employ VfM measures

Methodology of the study

This paper was prepared on the basis of the findings of two VfM studies carried out in 2014 and 2015. Figure 2 below provides a synopsis of methodology used in VfM studies of 2014 and 2015.



The performance to target ratio, which is the ratio of the programme performance to the physical programme target, was used to reflect efficiency in planning and implementation. A good planning mechanism helps set achievable target and a good implementation places focus on meeting the set targets. Similarly, expenditure ratio, which is the ratio of the actual expenditure to the allocated budget, was used to measure efficiency in planning and implementation and in managing finances while putting efforts to meet expected results. The fundamental aspect of the VfM study has been Cost Performance Ratio (CPR) which combines data related to financial performances and physical performances and generates evidences for economy and effectiveness of the programme implementation process and provides an integrated picture of the connection between financial and physical results. CPR has its own merits and demerits as this ratio may remain the same with different ratios of financial performance and programme (physical) performance. However, this is still a good tool for internal monitoring to improve the efficiency and effectiveness.

In order to verify information on effectiveness and equity, field visits in the programme districts were made and targeted beneficiaries, school children, village stakeholders, women groups, community groups were interviewed on the quality of benefits they received from the UNICEF assisted WASH programme. Stakeholders, partners and staff who were engaged in the programme implementation process were consulted to understand their engagement in the programme cycle.

UNICEF assisted WASH programme budget allocation and expenditure data was collected from the internal financial database systems, Programme Cooperation Agreements, Monitoring and Evaluation framework of UNICEF and implementing partners' financial reports.

VfM as a results based management (RBM) tool

In 2014, it was decided to amend the Monitoring and Evaluation framework for the UNICEF assisted WASH Programme to ensure effective tracking of results and operate with maximum efficiency in achieving the planned targets. As financial and performance management information are vital for using VfM process, the Result Based Management (RBM) was adopted and various set of indicators for internal and external reporting were reviewed. In consensus with all parties including donors, a feasible set of indicators was derived to make the system robust enough to keep track of physical and financial results. This provided the programme with a clear and manageable set of output indicators that laid the strong foundation to derive reliable data for the VfM assessment.

Similarly, in order to ensure that the expenditure is directly contributing to the desired results, a result based budget allocation was used as an innovative tool and knowledge product for wider adoption. Effective implementation of these two tools allowed VfM to take place.

The decision to align VfM tool with RBM approach also allowed the programme to strengthen result based budget allocation, result based monitoring and evaluation framework leading to increased confidence that each dollar spent is contributing to the desired outputs of the UNICEF assisted WASH programme.

Implication of VfM on programme management

UNICEF assisted WASH programme implemented the recommendations made by VfM assessment of 2014 to make critical decisions and bring changes in implementation that guided several elements of programme interventions in 2015. The 2014 VfM study identified certain programme areas that were not performing well and made a case that the Programme should review its partnerships, targets and performance to adopt corrective measures or limit scopes so that balanced VfM is achieved. This triggered the programme to make important decisions that included hiring WASH in School officer that can effectively manage local and national level programme and reviewing partnership strategy to enhance performance in water supply functionality. As a result, the CPR in 2015 for both WASH in School and water supply schemes with functionality improvement increased close to one. While there are issues with regards to setting targets, the section became able to achieve increased results in 2015. Currently, the programme has convinced its partners to make a strategic decision to make human resources, implementation mechanism efficient enough to create more results with the financial and technical resources available. This decision is a part of the implementation of the recommendation made by the VfM study in 2014.

Capitalizing value for money approach

This study relies much on expenditure ratio, performance ratio, cost performance ratio and unit cost analysis to produce an accurate picture of the economy and efficiency of the UNICEF assisted WASH programme. Because planned unit cost data per indicator for 2014 was not available, comparative analysis on unit cost per indicator has not been possible. However, planned and actual unit cost analysis of 2015 alone reflect that variation is not significant except in the output related to water safety plans development. Table 1 shows the results of Cost Performance Ratio (CPR) for a number of number of indicators for both 2014 and 2015. As expected there is a significant improvement in 2015 in CPR almost for all indicators as compared to 2014.

Calculating cost performance ratio (CPR) took three steps, firstly calculating the expenditure ratio and secondly the performance ratio (both as defined above), and at the final or third stage, taking the ratio of those two i.e., performance ratio divided by expenditure ratio = CPR. If the ratio is greater than one, the benefits outweigh costs and the programme is desirable. When Cost Performance Ratio is much above 100% or one, it leaves space for further analysis into whether there are opportunities costs spent to achieve the extra output. Just as performance ratio in each of the indicators has increased, so also there is significant increment in the cost performance ratio among those indicators.

Result Area	2015			2014		
	Expenditure Ratio	Performance Ratio	CPR	Expenditure Ratio	Performance Ratio	CPR
1. Number of Village Development Committees Declared Open Defecation Free (ODF)	72%	115%	1.60	99%	113%	1.14
2. Number of Child, Gender and Disabled friendly WASH facilities in schools constructed	74%	84%	1.13	91%	76%	0.84
3. Number of Water Safety Plans Completed	63%	44 %	0.69	-	-	-
4. Number of Water Supply Schemes Supported with Functionality Improvement	112%	140%	1.25	100%	63%	0.63

5. Number of beneficiaries from Completed Water Supply Schemes	100%	211%	2.11	100%	55%	0.55
--	------	------	------	------	-----	------

As can be seen from Table 1, the analysis gave relatively high CPR (1.14) for the number of Village Development Committees declared Open Defecation Free in 2014. This further witnessed high CPR of 1.6 in 2015 significant increase from 2014. This high performance in 2015 could be attributed to better organization of representatives of village development committees, schools and social groups to engage families, school children and youths for planning and operation of sanitation campaigns. This way, several costs such as cost for social mobilization and toilet installation are minimized. In majority of cases, families spend their labor force to construct toilets, and local leaders including parents and women groups volunteer to reach out to households and share critical messages on water, sanitation and hygiene. Local level innovations such as hero of generosity, reward, recognition have encouraged local donors to make financial donations to poor and disadvantaged families. ‘Hero of generosity’ is the title given to a local person who donates significantly to promote sanitation and hygiene in the communities.

In 2015, CPR for construction of Child, Gender and Disabled friendly WASH facilities in schools is also greater than one whereas this ratio was below one in 2014. In the area of water supply schemes supported with functionality improvement, the cost performance ratio was greater than one in 2015 while the ratio in 2014 was below one which implies that outputs from the funds spent is maximized more in 2015 than in 2014. However knowledge on how effective functionality of water supply schemes has been so far at the national context is yet to be established. UNICEF assisted WASH Programme has introduced an innovative monitoring and evaluation tool to assess the sustainability of the water supply schemes. This tool integrates five key factors, financial, technical, environmental, social and institutional in its evaluation tool. So far evaluation of five water supply schemes have been carried out and discussed with partners on the findings while recommendations were also shared with the government. As can be seen from Table 1, the performance in reaching target beneficiary from completed water supply schemes was disappointing until 2014, however, both the performance and expenditure ratio both increased in 2015. The 2014 CPR for this result area reflects least performance amongst the five results areas while this highest performance achieved for this in 2015.

After the VfM recommendation of 2014, WASH programme made a series of discussion with its implementing partners to make sure that results are achieved without delay. In 2014, to address this performance gap, negotiation was held with new partners to implement the water supply component. Despite the fact that better results were achieved with less resources, in majority of cases, less funds were utilized than planned amount reflecting the scope for reduction of allocated budget or increasing the target at the planning stage. Given the nature of the programme, setting lower target for the first implementation year and gradually increasing targets for the consecutive years would have been a better planning. However, both the performance growth and results against expenditure in 2015 are constructive.

Key lessons learned

Linking financial planning, expenditure, physical planning and results, in absence of a VfM framework, is complex and challenging. Effective use of VfM framework demands two mechanisms, a robust result based M&E framework and a robust result based budget allocation and expenditure. These mechanisms generate evidences enough to assess financial and physical performance together. Doing so has helped the programme become efficient in financial and result management. This has also generated scopes for the programme to create real time analysis on cost performance ratio leading to prompt and effective decision making process for improved results.

Findings of performance ratio, expenditure ratio and cost performance ratio have provided the programme with insights on effective planning and budget allocation. In this context, VfM has been both the simplest and an effective tool to keep track of the financial and physical performance and the relation between the two. Even in cases when the outcomes cannot be measured, the VfM perspective can open up scope for accurately sensing how results have been multiplied with the utilized resources.

Conclusion

UNICEF assisted WASH programme used VfM assessment not only as one of the evaluation tools but also as one of the result based management tools that helped the programme keep focus on delivering results. VfM study results showed that the programme was built on its strengths and made improvements in areas where performance was lagging behind in the past. Because of the constant efforts made, the programme delivered encouraging results, and its commitment to bridge performance gaps led it to review partnership strategy on water supply finally driving the programme to meet gaps of previous years and meet its overall targets in 2015. As quantitative data on actual and sustained outcomes, enabling policy environment, equity analysis and leveraged effects are not available, further studies on VfM can go beyond output measures and incorporate outcomes. While the programme has great opportunities to reduce unit cost and revisit its partnership strategies, performance and associated expenditure so far made substantiates that the programme has achieved good VfM in 2014 and 2015.

Acknowledgements

The authors would like to extend thanks to Antti Mikael Rautavaara, who played critical role to conduct 2014 Value for Money study, David Toomey who had been a key part of the VfM study in 2014, Bishow Raj Bhatt, and Sunita Sulpa, UNICEF WASH officers, Mukti Pokharel and Ambika Rimal of Nepal Red Cross Society and Gun Bahadur Magar of iDE whose support is incredible during 2015 VfM study.

References

- ADAM SMITH INTERNATIONAL (2012), Measuring and Maximizing Value for Money in Infrastructure Programmes. UKaid. (<https://www.gov.uk>)
- DEPARTMENT FOR INTERNATIONAL DEVELOPMENT 2011. *DFID's Approach to Value for Money (VfM)*. (<http://mande.co.uk>)
- NMICS 2014. *Multiple Indicator Cluster Survey*. Government of Nepal, National Planning Commission Secretariat, Central Bureau of Statistics.
- NMIP 2014, *National wide Coverage and Functionality Status of Water Supply and Sanitation in Nepal*. Department of Water Supply and Sewerage, Ministry of Urban Development, Government of Nepal.
- TOOMEY, D. and Gautam, A. 2015. *A Value for Money Case Study: UNICEF ONE WASH Programme*. UNICEF Nepal. *ONE WASH Annual Report*. 2015. WASH Section. pp. 136
- UNICEF Nepal. 2014. *ONE WASH Annual Report 2014*. WASH Section. pp. 146
- WHO/UNICEF. 2015. *Joint Monitoring Programme Report*. (<https://www.wssinfo.org>)

Note

The views expressed in this paper are those of the authors and do not necessarily reflect the views of the government/organizations they work for.

Contact details

Ms. Shova Adhikari worked for this study as a Value for Money expert. She is also a Chief Executive Officer of 'Vivriti Research and Analytics' and leads a team that conducts evaluations and surveys for development agencies. Ms. Anu Paudyal Gautam is WASH Specialist at UNICEF East Asia and the Pacific, Thailand. She earlier worked with UNICEF Nepal and contributed significantly to the VfM study presented in this paper.

Shova Adhikari
Lalitpur, Nepal
Tel: +977 9860316456
Email: shovaadhikari@vivritianalytics.com
www: vivritianalytics.com

Anu Paudyal Gautam
UNICEF, East Asia and the Pacific (EAPRO),
Thailand
Tel: +66 (0) 92-396-2457
Email: apgautam@unicef.org
www: www.unicef.org