SERA and iAGRI Agricultural Policy Seminar Series

Policy Assessment of the 1000-Days Focus Health Strategy for Improving Child Nutrition in Tanzania

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Abstract

This study was undertaken as part of the SERA-iAGRI Agricultural Policy Series to assess the feasibility of the 1000-day focus health strategy for improving child nutrition and health in Tanzania. The overall objective was to assess the existing policy environment in Tanzania and its implications to achieving intended positive outcomes of the 1000-days window in addressing child undernutrition/nutrition. Four main approaches were used to collect necessary data to answer the objectives of this study. They included: (i) Survey of all 297 health facilities in Morogoro Region, (ii) Collection of expert opinions – whereby members of the Morogoro Regional Health Management Team (RHMT) were engaged, (iii) Desk review of 12 identified public policy documents related with child health and nutrition, and (iv) Assessment of performance of the Antenatal Care in Tanzania through literature review.

The current situation of the surveyed health facilities, especially dispensaries, which serve the majority of women and their children in the rural areas, are not well equipped. For example, more than half of the surveyed dispensaries did not provide urine or blood hemoglobin tests due to lack of laboratory equipment and materials. In addition to lack of equipment, the dispensaries in rural areas also lack electricity, tap water and emergency transport. These are among the important amenities for the focused antenatal care. Therefore there is a need to invest more in equipping the dispensaries in Tanzania, especially in rural areas where they serve the majority. Another important aspect for consideration is establishment and strengthening of community nutrition committees of health facilities.

The 1000-days policy strategy requires high socio-political commitment by the government and strong stakeholder support of the government efforts. However, according to the expert opinions gathered in this study, it appears that the levels of commitment and support are low. The government has not built broad-based social and political support in the policy making process and in allocating adequate budget for nutrition activities. Therefore there is a great need for the government to adopt a participatory policy making process whereby public policies are open to public/stakeholders scrutiny. Also, government concern for nutrition should be reflected in the budget allocation.

Most of the reviewed policies in this study haven't included the 1000-days initiatives due to the fact many of these policies were formulated in the years back (1990's). However, there have been strong global initiatives to scale up nutrition in developing countries, which resulted into formulation of the National Nutrition Strategy (NNS) in Tanzania. The strategy was launched in 2012 and addresses issues of the first 1000 days of life. It is hoped that the strategy will facilitate inclusion of the maternal and child nutrition by the other public policies.

Reviewed studies on focused antenatal care (FANC) in Tanzania have shown that skilled antenatal human resources are lacking in most health facilities attending pregnant women on relevant measurements and counseling. Success of the 1000-days policy depends much on availability of enough skilled health workers at all levels in the health system. Therefore, there is need for recruiting more health workers and to provide frequent in-service training to build capacity of the existing staff.

1. Introduction

1.1 Background: The essence of the '1000 days' window

In January 2008, *The Lancet* medical journal ran a series of articles, which provided evidence, on the consequences of maternal and child undernutrition. The articles identified a critical window of time between the start of a woman's pregnancy and her child's second birthday in which nutrition lays the foundation for a person's lifelong health, cognitive development and future potential. This window for impact, later termed the 1,000 days window, has revolutionized the way the world approaches the seemingly intractable problems of hunger and malnutrition. By focusing investments on improving nutrition for women and children, from pregnancy to age two, much of the serious, often irreversible, damage caused by malnutrition can be prevented. Doing so is also extremely cost-effective. Leading economists have argued that improving nutrition is one of the best investments that can be made to achieve lasting progress in global health and development, estimating that every $1 spent on improving nutrition can have as much as a $138 return on investment (Hoddinottet al., 2012).

1.2 Necessary conditions for the 1000-days strategy to have positive outcomes

Four conditions are considered to be necessary for the 1000-days health strategy to have positive outcomes. These conditions, which form the basis of the present study, include the following:

- Presence of a well functioning Health System that adopts to the WHO's recommended Focused Antenatal Care (FANC) procedures
- Well equipped health facilities: infrastructure, availability of functioning equipment, availability of essential maternal and child health services, availability of nutrition related Information, Education and Communication (IEC), and institutional infrastructure
- Supportive enabling policy environment in the country: e.g. government commitment to fighting undernutrition in terms of organizing, prioritizing and budgeting
- Inclusion of maternal and infant health (and nutrition) considerations in other related development policies and strategies.

Presence of a well functioning Antenatal Care system: The potential of antenatal care services for reducing maternal morbidity and improving newborn survival and health has been widely acknowledged[1]. In 2001 the World Health Organization (WHO) issued guidance on a new model of antenatal care (ANC) called goal-oriented or focused antenatal care (FANC), for implementation in developing countries (Villar et al., 2001). The new model reduces the number of required antenatal visits to four, and provides focused services shown to improve maternal outcomes. FANC eliminates the traditional risk assessments and instead emphasizes helping women to maintain normal pregnancies by identifying existing health conditions, detecting emerging complications, promoting health, preparing for a healthy birth, and educating clients on postpartum care including nutrition, breastfeeding, and family planning. Trials conducted in Argentina, Cuba, Saudi Arabia, and Thailand proved that FANC was safe

[1]Abou-Zahr CL, Wardlaw TM: Antenatal care in developing countries: promises, achievements, and missed opportunities: an analysis of trends, levels and differentials, 1990-2001 Geneva: WHO; 2003.

and was a more sustainable, comprehensive, and effective ANC model (WHO 2001). Tanzania adopted the focused ANC policy in 2003.

Well equipped health facilities: For the goal-oriented or focused antenatal care (FANC) to be functional, the health facilities need to be well equipped in terms of infrastructure, availability of functioning equipment, availability of essential maternal and child health services, and availability of nutrition related information, IEC materials. The health facilities also need to have institutional infrastructure, which according to the health system in Tanzania, include three different types of committees namely Health Facility committee, Community Health committee and Community Nutrition committee.

Supportive enabling policy environment in the country: Lack of political will or political prioritisation has been blamed for insufficient progress in reducing hunger and undernutrition and therefore failure to achieve the Millenium Development Goals[2]. Political commitment to reduce hunger and undernutrition would be shown by purposeful and decisive public action; through public policies and programmes, public spending and legislation that are designed to tackle these twin problems. Attempts have been made by different researchers and development experts to design ways of assessing political commitment to reduce hunger and undernutrition by governments in the world. One of such attempts, and which is now widely used is the Hunger and Nutrition Commitment Index (HANCI) developed by a team of researchers from the Institute of Development Studies (IDS) of the University of Sussex in the UK (Lintelo et. al., 2013)[3]. Other previous attempts include food security metrics and scorecards such as the Global Hunger Index (WHH/IFPRI/Concern, 2012), the Global Food Security Index (EIU, 2012); SUN country analyses (SUN, 2012) and WHO's Global Landscape Analyses (WHO, 2012).

Inclusion of maternal and infant health (and nutrition) considerations in other related development policies and strategies: Maternal and infant health is a multifaceted issue that requires integration of various sectors in addressing the problem. Traditionally, health sector has been considered as the most important sector for addressing the problem probably due to its direct link to health outcomes. For example, the sector is important for addressing diseases which affect the maternal and infant health status. However, food intake and utilization are also crucial to the health outcome. This requires involvement of other sectors such as agriculture, community development as well as issues related with poverty alleviation. On the other hand, there are two approaches to integrating food and nutrition issues into sectoral policies, according to FAO[4]. The first one is integration of food and nutrition policy issues into overall and sectoral national development policies and strategies of a country. The second option is preparing food and nutrition policy document incorporating all aspects which are relevant for improving food and nutrition and taking into account the linkages, which exist to overall and sectoral development policies and strategies of a country. Tanzania adopted the second option where the Ministry of Health, through its agency Tanzania Food and Nutrition Center (TFNC), attempted to prepare a separate standalone policy to handle all food and nutrition issues including linkages with other sectors. However, the current food and nutrition

[2] FAO (2012) *The State of Food Insecurity in the World 2012*, Rome, Food and Agriculture Organisation of the UN

[3] Dolf te Lintelo, Lawrence Haddad, Rajith Lakshman and Karine Gatellier: The Hunger And Nutrition Commitment Index (HANCI 2012) - Measuring the Political Commitment to Reduce Hunger and Undernutrition in Developing Countries. Institute of Development Studies (IDS), University of Sussex, UK. April 2013.

[4]FAO (2011). Food security information for decision making. Communicating Food security. Version 1.0.. Distance Learning to support capacity building and training for National and local food security information systems and networks.

policy appears to lack the mandate to make other sectors abide to its desired linkages and has not been effective in changing the nutrition scenario in this country. Therefore, inclusion of maternal and infant health and nutrition considerations in other related development policies and strategies is very necessary in Tanzania.

1.3 Objectives of the study

The overall objective of this study was to assess the existing policy environment in Tanzania and its implications to achieving intended positive outcomes of the 1000-days window in addressing child nutrition in the country. This overall objective was meant to answer the research question: "Is the policy environment in Tanzania conducive for the 1000-days health strategy to achieve its goal of improving child nutrition and survival?"

In addressing the above mentioned overall objective as well as the research question, two specific objectives were set:

(i) To assess the existing health facilities for availability and conditions for necessary maternal and infant nutrition services
(ii) To assess the socio-political commitment in fighting under-nutrition in the country
(iii) To review public development policies and strategies related with maternal and child health and nutrition for inclusion of 1000 days window considerations
(iv) To review study findings on performance of Antenatal Care services in Tanzania.

2. Study approach and source of information

Four main approaches were used to collect necessary data to answer the objectives of this study. They included: (i) Survey of all health facilities in Morogoro Region, (ii) Expert opinions, (iii) Desk review of public policy documents, and (iv) Assessment of performance of the Antenatal Care services in Tanzania by reviewing available documented reports on the subject.

2.1 Survey of health facilities in Morogoro Region

A survey was conducted by visiting all the 297 registered health facilities in all seven districts in Morogoro Region. The office of the Morogoro Regional Medical Officer (RMO) was consulted to provide a list of all the health facilities. The facilities were of three categories namely; Dispensaries, Health Centers and Hospitals, and were owned by either government, private, faith-based organizations (FBOs) or organizations that are not faith-based. It must be noted here that only health facilities that were providing conventional health services were considered. Therefore, other facilities that provide 'alternative medicine', including 'herbalist' and/or traditional doctors, were excluded.

A specially designed check-list (**Appendix 2**) was used to collect information. The checklist consisted of five sections dealing with the situation of the health facility in terms of infrastructure, availability of maternal and child health services, and availability of functional equipment. Others were availability of nutrition related IEC materials, and availability of institutional infra-structure.

2.2 Expert opinions

Experts' opinions were gathered through a one day meeting with the Morogoro Regional Health Management Team (RHMT) on the 5th of July 2013. The meeting was held in form of a workshop whereby 17 members of the RHMT took part. A socio-political commitment assessment tool (**Appendix3**) adopted from the Hunger and Nutrition Commitment Index (HANCI), was used to guide the discussion to seek the experts' opinions. This provided a way of further clarifying some issues that were raised during the review of policy documents and survey of health facilities in Morogoro Region. The composition of the RHMT members included heads and representatives of all key units of the Regional and District Health Departments. The units included Reproductive and Child Health, Immunization, Malaria, HIV/AIDS and TB (Care and Treatment), Prevention of Mother to Child Transmission (PMTCT) and Health Surveillance. The discussion questions were structured around several themes (Box 1).

2.3 Desk review of public policy documents

A number of public policy documents from the sectors that were considered to be related with maternal and child health and nutrition were identified by researchers using their experience of working in Tanzania. A specially designed policy review guide was developed to serve as a data collection tool (**Appendix 4**). The tool aimed at assessing the extent to which nutrition, and especially maternal and child issues have been addressed. Included in the tool among others was information on date of policy approval, presence of programmes related to maternal and child nutrition, monitoring and evaluation, coordination mechanism and actors responsible for implementation of the policy. The policy documents were obtained in different ways, including requesting them from the various government ministries and downloading from government websites. A total of 13 policy and or strategies were reviewed.

Box 1: Policy themes that were covered in Experts' opinion

- Importance of the problems of child malnutrition in the country (or Morogoro Region)
- Kind of priority that the government gives to improving nutrition outcomes
- Policies that the national government currently undertakes to reduce undernutrition of children, and the adequacy of national government efforts towards fulfilling those policy goals
- Building of broad-based social and political support in the policy formulation in order to ensure success and longevity of the policies
- Subjection of the national government policies (aiming at addressing malnutrition reduction) to public scrutiny by citizens, civil society and the media
- Level of support that the government's efforts in improving nutrition receive from different key stakeholders (e.g. the general public, civil society groups, political opposition, civil service, international donors, media and the private sector)
- How clearly are public policy preferences aiming to address undernutrition set out in national government documents?
- How well are budget lines related to nutrition developed in the national government budget?
- How developed are national government systems generating knowledge and evidence for informing nutrition policy process?
- Leadership in nutrition – perceived extent to which senior leaders speak out publicly against under-nutrition; how convincing are their statements; and level of empirical understanding these leaders have on under-nutrition in the country

- Extent to which national government policy preferences for addressing nutrition are reflected in its budget allocation
- How well has the government developed transparent financial mechanisms for earmarked nutrition funding?
- Enhancement and utilization of existing administrative capacity for improving nutrition by the government.

2.4 Assessment of performance of Antenatal Care services in Tanzania

Various published reports and scientific studies conducted in Tanzania were reviewed to establish the state of Antenatal Care services in the country with reference to the WHO's guides on antenatal care procedures. Internet web searching was used to identify the various reports and scientific papers.

3. Findings

3.1 Situation of the health facilities

A total of 297 health facilities in all the districts of Morogoro Region were surveyed. A number of issues were considered during the assessment, namely: types and ownership of health facility, infrastructure, availability of maternal and infant nutrition services, availability of functional equipment, and availability of institutional infrastructure. Each of these is reported in the next sections.

3.1.1 Types and Ownership of Health Facilities

Three types of health facilities were distinguished according to the health system of Tanzania, namely: hospitals, health centers and dispensaries. Also, four categories of ownership were identified as government, private, religious organizations, and non-religious organizations. Table 1 presents the distribution of the surveyed health facilities according to type of facility and ownership categories. Majority of the health facilities were government owned (72%), in which dispensaries were predominant in terms of numbers (83%).

Table 1: Type and ownership of the surveyed health facilities

Ownership category	Type of Facility						Total	
	Hospitals		Health Centers		Dispensaries			
	N	%	n	%	n	%	N	%
Government	6	40	27	75	180	73.2	**213**	71.7
Private	3	20	2	5.5	14	5.7	**19**	6.4
Religious Organizations	6	40	5	13.9	43	17.5	**54**	18.2
Non-Religious Organizations	0	0	2	5.5	9	3.7	**11**	3.7
	15	5.1	**36**	12.1	**246**	**82.8**	**297**	100

3.1.2 Infrastructure

Table 2 shows the availability of infrastructures among the surveyed health facilities. Again, it is not surprising that most of the dispensaries are less equipped with infrastructural facilities, while hospitals appear to be relatively better equipped. It is interesting that the advent of cellular phones has enabled even the otherwise remotely located dispensaries to be accessible. However, availability of emergency transportation such as ambulance remains a big constraint in all types of facilities.

3.1.3 Availability of maternal & infant nutrition services

Results of the availability of maternal & infant nutrition services among the surveyed health facilities are summarized in Table 3. While all Hospitals and Health Centers in Morogoro Region appear to include much of maternal and infant nutrition services, the Dispensaries are particularly lacking three of such services namely: assessment of hemoglobin, urine testing and family planning services. Considering that majority of the pregnant women in the rural areas are attended in Dispensaries and not in Health Centers or Hospitals, it is likely that they are missing these important maternal and infant nutrition services, which are among the WHO's recommended focused antenatal care (FANC).

Table 2: Availability of infrastructure among the surveyed health facilities

Type of infra-structure	Hospitals (n=15)	Health Centers (n=36)	Dispensaries (n=246)	TOTAL (N=297)
	%	%	%	%
Electricity	100	75	39	47
Tap Water	100	75	47	53
Telephone (landline)	73	17	7	12
Telephone (cellular)	100	92	94	94
Radio call	27	17	8	10
Emergency transport	67	72	7	18
Laboratory	100	86	26	37
Computer	93	69	6	18
Internet connection	67	44	6	14

Table 3: Availability of maternal & infant nutrition services among the surveyed health facilities

Maternal & infant nutrition service	Hospitals (n=15)	Health Centers (n=36)	Dispensaries (n=246)	TOTAL (N=297)
	%	%	%	%
Vaccination	100	100	87	89
PMTCT	100	100	85	86
SP provision (anti-malaria)	100	100	86	88
Deworming	100	100	86	88
Provision of Iron and Folic tablets	100	100	85	88
Provision of treated mosquito bed nets	100	100	87	90
Assessment of Haemoglobin concentration in blood	100	92	52	60
Urine testing	100	94	40	50
Weight measurement	100	97	88	90
Height measurement	100	97	89	91
Physical assessment of pregnancy	100	100	89	91
Blood pressure	100	97	89	91
Delivery service	100	86	81	83
Growth monitoring	100	100	86	91
Family planning services	80	89	76	78
Post-delivery follow-ups	100	94	83	85

3.1.4 Availability of functional equipment

Assessment of availability of functional equipment among the surveyed health facilities (Table 4) portrayed a picture resembling that of the available infrastructure. While Hospitals and Health Centers are better equipped, Dispensaries are lacking much of the equipment particularly functioning microscope, Mid Upper Arm Circumference measuring (MUAC) tapes, and Haemoglobinometer for haemoglobin testing. These are among the important equipment for the focused antenatal care. With the present frequent power cuts and rationing

in the country, generators are very crucial equipment in a health facility; however, only 7% of the dispensaries have this equipment.

Table 4: Availability of functional equipment among the surveyed health facilities

Equipment	Hospitals (n=15)	Health Centers (n=36)	Dispensaries (n=246)	TOTAL (N=297)
	%	%	%	%
Microscope	100	94	30	41
Weighing scale	100	100	95	96
Length board	100	97	93	94
MUAC tapes	87	42	15	23
Haemoglobinometer	100	78	24	34
Refrigerator	100	94	90	91
Cool boxes	100	97	89	91
Generator	80	39	7	15
Ambulance	67	61	6	16
Tallquest (Haemoglobin testing)	67	71	51	55

3.1.5 Availability of institutional infrastructure

Another interesting aspect assessed among the surveyed health facilities was the availability of institutional infrastructure, which included presence of committees for health facility, community health and community nutrition. Results are presented in Table 5. While committees for community health and health facility appear to be well formed, there is great concern for the community nutrition committees in all categories of the health facilities in Morogoro Region.

Table 5: Availability of institutional infrastructure among the surveyed health facilities

Institutional infrastructure	Hospitals (n=15)	Health Centers (n=36)	Dispensaries (n=246)	TOTAL (N=297)
	%	%	%	%
Health facility committee	93	89	74	76
Community Health committee	100	94	89	91
Community Nutrition committee	0	0	2	1

Summary: Situation of health facilities

It is commended that most of the health facilities have included some of the services necessary for maternal and infant health such as the antenatal care. These health facilities are of all categories (dispensaries, health centers and hospitals) – and the ownership did not matter – the government, the non-governmental organizations as well as the privately owned, did include such important services for survival of mother and child. This stands as a good example of public-private-partnership in improving health care delivery. However, the facilities, especially dispensaries, which serve the majority of women (and their children) in the rural areas, are not well equipped. This is something to be concerned about. There is a need to invest more in equipping the health facilities in Morogoro Region, and throughout

Tanzania, if the country wants to realize the positive effects of the 1000-days policy strategy in maternal and child health. There is strong scientific evidence to support the strategy.

3.2 Socio-political commitment to fight under-nutrition (Expert Opinions)

As mentioned earlier in section 2, socio-political commitment by the government to fight under-nutrition was partly assessed by the opinions given by members of the Morogoro Regional Health Management Team (RHMT). A series of related questions with 6-point multiple scale answers were provided for selection in measuring their views or opinions. The first two questions were of general nature (Box 2). The Experts had the opinion that child under-nutrition problems in the country were important, however, they felt that the kind of efforts the government was giving to improving nutrition outcomes were only moderate.

Box 2: Response of the interviewed experts on the first two general questions

- How important are child under-nutrition problems in the country?:(Highly critical; Important; Somewhat important; Of limited importance; Unimportant; and Don't know)
- What kind of a priority does the government give to improving nutrition outcomes? (Very high priority; High priority; Moderate priority; Low priority; Very low priority; and Don't know).

Other important aspects assessed by the Experts, which are presented in the next sections, included:

- Assessment of public policies aiming at improving nutrition
- Stakeholders' levels of supporting the government efforts to improve nutrition
- Participation of key senior public leaders in nutrition policy
- Government enhancement of administrative and financial capacities to effectively address nutrition problems in the country
- Budgets related with nutrition

3.2.1 Assessment of public policies aiming at improving nutrition

Four issues were assessed by the interviewed Experts, namely: (i) Policies or strategies considered most relevant in reducing child under-nutrition and sufficiency of the government efforts towards fulfilling the policy goals; (ii) Extent of building broad-based social and political support by public policies in order to ensure success; (iii) How developed are national government systems generating knowledge and evidence for informing nutrition policy; and (iv)How accessible is national government policy (aiming to address under-nutrition reduction) to public scrutiny.

(i) Policies or strategies considered most relevant in reducing child under-nutrition, and sufficiency of the government efforts towards fulfilling policy goals

Five government policies considered by the participating experts to be the most relevant in reducing child under-nutrition were mentioned to be:

- Food and Nutrition Policy
- National Health Policy
- Education Policy

- Community Development Policy
- National Agriculture Policy

It is interesting that the experts could not think of any of the recent nutrition improving initiatives in the country such as the National Nutrition Strategy (NNS). It might be that, because most of them were of medical profession, they thought that Food and Nutrition Policy is also covering the NNS. The inclusion of National Agriculture Policy is perhaps a reflection of importance of agriculture sector for food availability, which is an important aspect of food security.

On the other hand, using a five-point scale *(very important; important; undecided; unimportant; and very unimportant)*, Experts felt that the government was considering these policies to be *important* (except for the Community Development Policy) as shown in Table 6. However, Experts indicated that the government efforts towards fulfilling the goals of policies they identified to be key in reducing child undernutrition were only *somewhat sufficient* (on a five-point scale of *very sufficient; somewhat sufficient; undecided; somewhat insufficient; and very insufficient*). Education and Community Development Policies were scored even worse (of *undeciced*).

Table 6: Opinions by the interviewed Experts with regard to importance given by the government on the key policies they considerimportant for reducing child malnutrition

Policy	**How important does the government considers the policy?**	**How adequate are government efforts towards fulfilling policy goals?**
Food and Nutrition Policy	Important	Somewhat sufficient
National Health Policy	Important	Somewhat sufficient
Education Policy	Important	Undecided
Community Development Policy	Undecided	Undecided
National Agriculture Policy	Important	Somewhat sufficient

(ii) Extent of building broad-based social and political support by public policies in order to ensure success

In commenting on the extent to which public policies in the country build broad-based social and political support in order to ensure success, Experts indicated to be <u>*undecided.*</u> This was scored in a six-point scale *of very strongly, strongly, undecided, weakly, very weakly,* and *don't know.* This is a clear indication that the Experts felt that public policies, including those relevant to improving nutrition, were not building broad-based social and political support in the country.

(iii) How developed are national government systems generating knowledge and evidence for informing nutrition policy

Another important issue assessed was how developed were the national government systems for generating knowledge and evidence to inform nutrition policy. Again, a six-point scale was used (*strongly developed; developed; somewhat; poorly developed; nonexistent; and don't know*). Result showed that it was only <u>*somewhat*</u>. The implication is that the policy process for nutrition in the country is not likely to be based on real-situation evidence, but rather on certain influences, which may not even be realistic.

(iv) How accessible are national government policies to public scrutiny

On the question of how accessible are national government policies aiming to address undernutrition reduction to public scrutiny (by citizens, civil society, or media), Experts felt that they were*fairly inaccessible*. This is based on a six-point scale of *fully accessible; fairly accessible; undecided; fairly inaccessible; inaccessible;* and *don't know*. This implies that such national government policies were passed for use in the country without being subjected to public scrutiny, which indicates that the policy making process has not built broad-based social and political support in the society.

3.2.2Stakeholders' levels of supporting the government efforts to improve nutrition of children and women

Eight types of stakeholders were assessed by the interviewed experts on the level to which these stakeholders were in support of the government's efforts to improve nutrition. The stakeholders included: the general public; civil society groups; central government; political opposition; civil service; international donors; private sector; and media. Six-point scale was used for scoring in the assessment (consisting of *very strong; strong; moderate; weak; very weak;* and *don't know*). Table 7 summarizes the results of what the Experts scored for each of the stakeholder category.

It is interesting that only international donors and the media were scored as being strong in supporting government's efforts to improve nutrition of children and women. Experts felt that even for the central government or civil servants, where they also belong, only provided moderate support to the government's efforts. This was together with the private sector. The general public and the civil society groups were considered to provide weak support, while political opposition was the worst (very weak).

Table 7: Reported levels of support to government efforts in improving nutrition of children and women by different stakeholders

	Level of support*					
Stakeholder category	***1***	***2***	***3***	***4***	***5***	***6***
The general public				*X*		
Civil society groups				*X*		
Central Government			*X*			
Political opposition					*X*	
Civil Servants			*X*			
International donors		*X*				
Private sector			*X*			
Media		*X*				

***Key: 1. Very strong; 2. Strong; 3.Moderate; 4. Weak; 5. Very weak; 6. Don't know**

3.2.3 Participation of key senior public leaders in nutrition policy

The key senior public leaders considered in this respect include political, civil society and civil servant leaders at the national levels. Two issues were focused, which are: (i) speaking publicly against undernutrition (and how convincing are such statements), and (ii) levels of empirical understanding about status, causal and potential solutions of undernutrition. Results are presented in the next three sections.

(i) Speaking publicly against undernutrition
Using a six-point scale (*very strongly; strongly; undecided; weakly; very weakly;* and *don't know*), the three categories of public leaders were assessed by the Experts. Political leaders were scored as being *weakly* while civil society and civil servant leaders were both placed in the middle (*undecided*).

(ii) How convincing are the statements made
In terms of how convincing the statements given by both the political leaders and civil society leaders the responsewas indifferent (*undecided*), while those of civil servant leaders were ranked as *convincing*. The respective scale consisted of six points (*highly convincing; convincing; undecided; not very convincing; highly unconvincing;* and *don't know).*

(iii) Level of empirical understanding about status, causal and potential solutions of undernutrition
Six-point scale was used to rank the opinions by the interviewed Experts about levels of empirical understanding about status, causal and potential solutions of under-nutrition. The scale consisted of: *very high; high; moderate; weak; very weak;* and *don't know*. Results are presented in Table 8. Senior civil servants were ranked high in all the three aspects of empirical understanding (i.e. status of under-nutrition, causal factors, and potential solutions) while civil society leaders were ranked moderate throughout. On the other hand, senior politicians were scored high in understanding the status of under-nutrition, but moderate for the causal factors and weak in understanding the potential solutions.

Table 8: Reported level of empirical understanding about status, causal and potential solutions of under-nutrition by public leaders

Category of public leader	Levels of empirical understanding about undernutrition		
	Status	***Causal factors***	***Potential solutions***
Senior politicians	High	Moderate	Weak
Senior civil servants	High	High	High
Civil society leaders	Moderate	Moderate	Moderate

3.2.4 Government enhancement of administrative and financial capacities to effectively address nutrition problems in the country

Experts assessed the way in which the government was enhancing the administrative and financial capacities in the country to effectively address nutrition problems. For both aspects, a six-point scale (consisting of*very strongly; strongly; neither strongly nor weakly; weakly; very weakly;*and *don't know)* was used.In all the two issues, Experts had the opinions that the government was *neither strongly nor weakly* in enhancing the capacities (Table 9). According to the Experts, the government has not done enough to provide the necessary working conditions of the key workers responsible to implementing nutrition activities, including training, housing, working facilities and equipment. They also felt that the government was not keen in allocating sufficient budget to implement the necessary programmes, projects and activities designed to improve nutrition.

Table 9: Opinion about Government enhancement of administrative and financial capacities to effectively address nutrition problems in the country

Scale	Administrative capacity	Financial capacity
Very strongly		
Strongly		
Neither strongly nor weakly	*X*	*X*
Weakly		
Very weakly		
Don't know		

3.2.5 Government utilization of existing administrative and financial capacities to effectively address nutrition in the country

Experts also assessed the way in which the government was utilizing the existing administrative and financial capacities in the country to effectively address nutrition problems. A similar six-point scale consisting of *very strongly; strongly; neither strongly nor weakly; weakly; very weakly;* and *don't know* was used. Again, Experts had the opinions that government was *neither strongly nor weakly* in utilizing the existing capacities in all the two issues (Table 10). The main argument put forward by the Experts sounded same as they had pointed out previously (above), that the government was not making full use of its workers responsible to implementing nutrition activities because it has not done enough to provide the necessary working conditions such as training, housing, and working facilities and equipment. They thought that all this was because the government was not allocating sufficient budget or having good plans for enhancing or motivating the workers.

Table 10: Opinion about Government utilization of existing administrative and financial capacities to effectively address nutrition problems in the country

Scale	Administrative capacity	Financial capacity
Very strongly		
Strongly		
Neither strongly nor weakly	*X*	*X*
Weakly		
Very weakly		
Don't know		

3.2.6 Budgets related with nutrition

Three issues related with government budgeting for nutrition were assessed by the Experts. The three issues, which are presented below, were:

- The way in which budget lines related to nutrition are developed in the national budgets
- Reflection of national government policy preferences for addressing nutrition in its budget allocations
- Transparency of the national government's financial mechanisms for earmarked nutrition funding

(i) The way in which budget lines related to nutrition are developed in the national budgets

Using a six-point scale, the Experts assessed the way in which budget lines related to nutrition are developed in the national budgets. The scale consisted of: *very clear; clearly; somewhat clearly; unclear; very unclear* and *don't know.* Experts reported that the way in which budget lines related to nutrition are developed were *very unclear*. The main argument given was that very often issues dealing with nutrition were not clearly distinguished in the national budget lines, and therefore they were 'lumped' together with the activities of other sectors such as health, education, community development, agriculture and livestock sectors.

(ii) Reflection of national government policy preferences for addressing nutrition in its budget allocations

Using a six-point scale in assessment, Experts indicated that the reflection of national policy preferences for addressing nutrition in its budget allocations was *weakly*. The assessment was based on a six-point scale consisting of *very strongly; strongly; neither strongly nor weakly; weakly; very weakly/not at all;* and *don't know.* They pointed out that, in general the government leaders agree that nutrition improvement is necessary for the country, but when it comes to taking actions, the required budgets are not provided, and therefore that 'desire' is not reflected.

(iii) Transparency of the national government's financial mechanisms for earmarked nutrition funding

Again, a six-point scale similar to the one used in section (ii) above was employed to obtain opinion of the Experts about government's transparency in handling funds earmarked for nutrition. They felt that the mechanisms were *neither strongly nor weakly*. They argued that because there were no clear budget lines set aside specifically for nutrition, as pointed out in section (i) above, it was then difficult to control those funds – and very often they never get into the hands of those really responsible.

Summary: Socio-political commitment to fighting undernutrion

There is no doubt that the problem of child under-nutrition is of great concern in Tanzania. Although the government has undertaken a number of initiatives to improve nutrition in the country, in particular children who appear to be the most vulnerable, such efforts are only little appreciated by many stakeholders – including experts working in the health sector, such as the members of Regional Health Management Team (RHMT), who were interviewed as key informants. It appears that lack of appreciation is caused mainly by the fact that the government has not built broad-based social and political support in the policy making process – including those policies aiming at improving nutrition. It is no wonder that the interviewed experts felt that majority of the stakeholders, including the general public – but also the civil servants, have low support for the government's efforts to improve nutrition of children and women. Another major concern was on the budgeting aspect for nutrition issues, whereby it was generally felt that although the government is expressing great concern for nutrition in the country, the concern is not reflected in the size of budget allocated for nutrition. The 1000-days policy strategy requires high socio-political commitment by the government and strong support by stakeholders for the government efforts. Considering the current situation, it appears that both the two are at low levels.

3.3 Review of government policy documents

A total of 12 policy documents were reviewed (Table 11), which included 8 government sector policies, three policy strategies, and one development vision (the Tanzania Development Vision 2025). The government sector policies ranged from health and HIV/AIDS to nutrition and community, child, research, women and gender development, and population. Two of the three reviewed policy strategies are of the Ministry of Health and Social Welfare, while the other one (MKUKUTA I & II) is from the Vice President's Office.

Table 11: List of the reviewed policy documents – and their affiliations

National Health Policy - (Ministry of Health and Social Welfare)
Food and Nutrition Policy - (Tanzania Food and Nutrition Centre – Ministry of Health and Social Welfare)
Child Development Policy - (Ministry of Community Development, Women Affairs and Children)
Community Development Policy - (Ministry of Community Development, Women Affairs and Children)
National Population Policy - (Ministry of Planning, Economy and Empowerment)
National Research and Development Policy - (Ministry of Communication Science and Technology)
National Policy on HIV/AIDS - (Prime Minister's Office)
Women and Gender Development Policy - (Ministry of Community Development, Women Affairs and Children)
National Nutrition Strategy July 2011/12 - June 2015/16 - (Ministry of Health and Social Welfare)
National Strategy for Growth and Reduction of Poverty (**MKUKUTA** I & II) - (Vice President's Office)
The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015 - (Ministry of Health and Social Welfare)
The Tanzania Development Vision 2025 - (Planning Commission)

Several aspects were assessed using a specially designed policy review tool (Appendix 4). The key aspects assessed in the policy documents included the following:

- The extent to which the need to improve health and nutrition at the 1000 days has been directly stipulated in the policy document
- Issues of health and/or nutrition of the 1000 days that have been stated in the policy documents
- Where the 'need to improve health & nutrition at the 1000 days' has been stipulated in the policy document

Results are presented in Appendix 1, and the description of each aspect is given in the next sections.

3.3.1 The extent to which the need to improve health and nutrition at the 1000 days has been directly stipulated in the policy document

Three categories were used in assessing the extent to which the need to improve health and nutrition at the 1000 days has been directly stipulated in the policy document. The three categories were namely: *quite good* (more than 4 times), *fairly good* (3 or 4 times, and *hardly or none* (two times or less). Results are presented in Table 12. Only four out of the twelve policy documents that were reviewed in this study can be considered to have included the need to improve health and nutrition at the 1000 days in a 'quite good' category, and only two

are in a 'fairly good' category while the rest (half) of all the reviewed policy documents have hardly (or not) included the issue.

Table 12: Distribution of reviewed policy documents according the extent to which the need to improve health and nutrition at the 1000 days has been directly stipulated

Extent of stipulation	Policy document
Quite good (more than 4 times)	Food and Nutrition Policy; National Population Policy; National Nutrition Strategy; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015
Fairly good (3 or 4 times)	National Health Policy; MKUKUTA-I&II
Hardly or none at all	Child Development Policy; Women & Gender Development Policy; Community Development Policy; National Research and Development Policy; National Policy on HIV/AIDS; The Tanzania Development Vision 2025

3.3.2 Identified issues of health and/or nutrition of the 1000-days stated in the policy documents

Ten key issues of health and/nutrition related with the 1000 days were identified in the reviewed policy documents. The issues included:

- Reducing morbidity and mortality;
- Proper feeding practices;
- Maternal and/or Infant health;
- Family planning;
- Care for Maternal/Infant/Child;
- Malnutrition (general);
- Nutrition education;
- Antenatal care & Reproductive health;
- Prevention of HIV/AIDS Transmission; and
- Care for people living with HIV/AIDS.

Table 13 shows the results of the assessment. Maternal and/or Infant health has been covered by the highest number of policy documents (7) followed by Care for Maternal/ Infant/ Child (5). Three key issues (Proper feeding practices; Family planning; and Malnutrition (general) were each covered in four policy documents.

Table 13: Distribution of reviewed policy documents according to the identified issues of health and/or nutrition related with the 1000 days stated in

Issues of health and/or nutrition of the 1000 days	Policy document
Reducing morbidity and mortality	National Health Policy;The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015
Proper feeding practices	Food and Nutrition Policy; National Health Policy; National Nutrition Strategy; The National Road Map Strategic Plan to

	Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015
Maternal and/or Infant health	National Health Policy; National Nutrition Strategy; Child Development Policy; Women & Gender Development Policy; MKUKUTA-I&II; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; National Population Policy
Family planning	National Health Policy; MKUKUTA-I&II; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; National Population Policy
Care for Maternal/Infant/Child	Food and Nutrition Policy; National Nutrition Strategy; Child Development Policy; Women & Gender Development Policy; Community Development Policy
Malnutrition (general)	Food and Nutrition Policy; National Nutrition Strategy; MKUKUTA-I&II; National Population Policy
Nutrition education	Food and Nutrition Policy; National Nutrition Strategy; MKUKUTA-I&II
Antenatal care & Reproductive health	The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; National Population Policy; Women & Gender Development Policy
Prevention of HIV/AIDS Transmission	National Policy on HIV/AIDS; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015
Care for people living with HIV/AIDS	National Policy on HIV/AIDS

3.3.3Where 'the need to improve health & nutrition at the 1000 days' has been stipulated in the policy document

Three areas within the reviewed policy documents were identified to contain the stipulated need to improve health & nutrition at the 1000 days. The three areas are:

- Within the policy's goals and objectives
- Within the policy measures or strategies
- Elsewhere in the document

Table 14 shows results of the assessment whereby only half of the reviewed policies (6) have stated the need to improve health & nutrition at the 1000-days within their policy's goals or objectives. On the other hand, seven of the 12 reviewed policy documents have stated the need to improve health & nutrition at the 1000 days within the policy measures or strategies. However, a larger number of reviewed policy documents had their statements elsewhere. Other policy documents, such as the Food and Nutrition Policy, have their statements in all the three areas, while other policy documents consisted of such statements in two areas.

Table 14: Distribution of reviewed policy documents according to where has 'the need to improve health & nutrition at the 1000 days' been stipulated in

Where stipulated	Policy document
Within the policy's goals and objectives	Food and Nutrition Policy; National Population Policy; National Nutrition Strategy; National Health Policy; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; Child Development Policy
Within the policy measures or strategies	Food and Nutrition Policy; National Health Policy; National Population Policy; National Nutrition Strategy; National Policy on HIV/AIDS; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; MKUKUTA-I&II
Elsewhere in the document	Food and Nutrition Policy; Child Development Policy; Women & Gender Development Policy; Community Development Policy; National Policy on HIV/AIDS; The National Road Map Strategic Plan to Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania 2008 – 2015; MKUKUTA-I&II; National Nutrition Strategy

Summary: Review of government policy documents

For the 1000-day policy strategy to be successful in achieving the positive effects of improving child health and nutrition, it is important that the strategy is supported by other government public policies. However, this condition is currently not fulfilled in Tanzania. Most of the reviewed government public policies that have relationship with health and nutrition of children (and mothers) have included little or none. It is hoped that perhaps with the increasing public awareness about the importance of child's nutrition at early age, policy makers will also be sensitized to consider inclusion of child nutrition when writing new policies or when revising the current ones.

3.4 Performance of the Antenatal Care services in Tanzania

Available statistics indicate that maternal mortality in the country had been on downward trend from independence in 1961 to 1990, but the trend reversed to an upward direction since then (Mandara and Kaisi, 1991; NBS, 2005; 2010). It is believed that, generally, the health system has been weakening and hence the accessibility and quality of maternal health services delivery worsened (Shija et al., 2011). For example, it was estimated that the proportion of available health professionals in the health facilities in 1999 was only 32% of the requirement (MoHSW, 2007). It is estimated by URT (2005) that deliveries assisted by skilled attendants are still low at only 51% (83% in urban areas and 42% in rural areas). The situation is made even worse by insufficient emergency obstetric care services, coupled with lack of functioning blood banks in most health facilities, in addressing complicated pregnancies (Shija et al., 2011). The authors have further blamed the referral system, which has serious challenges including limited number of ambulances; unreliable logistics and communication system; and low community based facilitated referral system. Postnatal care is a key for continuum of care from home to health facility for both maternal and baby health since women can access family planning counseling, management of anaemia, referral for bleeding and infection complication and baby check-up as well (MoHSW, 2009). However, postnatal care in the country is poorly accessed especially to women who deliver at home (NBS,2005).

The Ministry of Health and Social Welfare reported an overall poor attendance to postnatal check-up of less than 30% (MoHSW, 2009).

Several studies have attempted to assess the antenatal situation in Tanzania, especially with respect to the recommended WHO's Focused Antenatal Care (FANC). Gross et al. (2011) used different qualitative research techniques to investigate health workers' antenatal care practices in four public antenatal care clinics in the Kilombero Valley, south-eastern Tanzania, where a total of 36 antenatal care consultations were observed and compared with the national Focused Antenatal Care guidelines. They observed that the delivery of antenatal care services to pregnant women at the selected antenatal care clinics varied widely. Some services that are recommended by the FANC guidelines were given to all women while other services were not delivered at all. Factors influencing health workers' practices leading to poor implementation of the FANC guidelines included shortage of trained staff, absenteeism, supply shortages and use of working tools that are not consistent with the FANC guidelines. Magoma et al. (2011) reported that service providers in Ngorongoro District in rural Tanzania were not covering most of the recommended topics of FANC critical to improving maternal and newborn survival when pregnant women went for antenatal care. A cross-sectional study in three countries of Tanzania, Uganda and Burkina Faso (Conrad et al., 2012) assessed the health worker's compliance to the FANC. The authors noted a substantial variation in the provision of antenatal care services among health facilities within and among the country sites, but generally, the workers omitted some of the practices stipulated in the FANC guidelines. Also, reagents for laboratory tests and drugs as outlined in the guidelines were often out of stock in most facilities.

Another study in Rufiji District in Tanzania (Pembe et al., 2010) noted that two out of five clients were not counseled on pregnancy danger signs, and that the higher trained cadre (registered or enrolled nurses) were not informing majority of clients about pregnancy danger signs compared to the lower cadres (nurse auxiliaries). In their semi-longitudinal study in southern part of Tanzania, Mrisho et al. (2009) concluded that there was a need to improve the antenatal and postnatal care by addressing geographical and economical access while striving to make services more culturally sensitive. They observed that women made late initiation of antenatal care to avoid having to make several visits. Other concerns included fear of encountering wild animals on the way to clinic as well as lack of money.

Summary: Performance of the Antenatal Care services in Tanzania

By being among the first countries in the sub-Saharan Africa to adopt the Focused Antenatal Care (FANC), as recommended by the World Health Organization (WHO), Tanzania has shown its commitment to enhance child and maternal survival. However, reviewed studies have shown that we still have a long way to go before we are able to fully benefit from the FANC approach. Much of the weaknesses lie in two main areas, namely human resource based and poor equipped health facilities. Therefore another major investment area in health should be in training the necessary manpower. Success of the 1000-days policy depends much on availability of enough skilled health workers at all levels of the health delivery system.

4. Conclusion and policy recommendations

The current situations of the facilities, especially dispensaries, which serve the majority of women and their children in the rural areas, are not well equipped. For example, more than half of the surveyed dispensaries did not provide urine or blood hemoglobin tests due to lack of laboratory equipment and materials. In addition to lack of equipment, the dispensaries in rural areas also lack electricity, tap water and emergency transport. These are among the important amenities for the focused antenatal care. Therefore there is a need to invest more in equipping the dispensaries in Tanzania, especially in rural areas where they serve the majority. Another important aspect for consideration is establishment and strengthening of community nutrition committees of health facilities.

The 1000-days policy strategy requires high socio-political commitment by the government and strong stakeholder support of the government efforts. However, it appears that the levels of commitment and support are low. The government has not built broad-based social and political support in the policy making process and in allocating adequate budget for nutrition activities. Therefore there is a great need for the government to adopt a participatory policy making process whereby public policies are open to public/stakeholders scrutiny. Also, government concern for nutrition should be reflected in the budget allocation.

Most of the reviewed policies in this study haven't included the 1000-days initiatives due to the fact many of these policies were formulated in the years back (1990's). However, there have been strong global initiatives to scale up nutrition in developing countries, which resulted into formulation of the National Nutrition Strategy (NNS) in Tanzania. The strategy was launched in 2012 and addresses issues of the first 1000 days of life. It is hoped that the strategy will facilitate inclusion of the maternal and child nutrition by the other public policies.

Reviewed studies on focused antenatal care (FANC) in Tanzania have shown that skilled antenatal human resources are lacking in most health facilities attending pregnant women on relevant measurements and counseling. Success of the 1000-days policy depends much on availability of enough skilled health workers at all levels in the health system. Therefore, there is need for recruiting more health workers and to provide frequent in-service training to build capacity of the existing staff.

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Appendix 1: Summarized Review of Public Policy Documents with regard to 'the need to improve health & nutrition at the 1000 days

NAME OF POLICY	When was it formulated / revised	Extent to which the need to improve health and nutrition at the 1000 days has been directly stipulated in the policy document*	Issues of health and/or nutrition of the 1000 days have been stated	Where has 'the need to improve health & nutrition at the 1000 days' been stipulated in the policy document**	If mentioned as a policy measure or strategy, what type of policy measure is it? ***	If the policy include goals and targets, timelines, roles and responsibilities	If policy measures for improving health & nutrition at the 1000 days include: -M&E plan -Nutrition indicators -Routine data source
National Health Policy (Ministry of Health and Social Welfare)	1990	Fairly good (three to four times)	-Reduce morbidity and mortality -Proper feeding practices -Maternal & infant health -Family planning	- Within the policy's goals and objectives - Within the policy measures or strategies	-Programme type	- Responsibilities	-Not clear
Food and Nutrition Policy (Tanzania Food and Nutrition Centre – Ministry of Health and Social Welfare)	1992 (has not been revised)	Quite good (more than four times)	-Malnutrition -Breast and complementary feeding -Care for pregnant and lactating women –Nutrition education	- Within the policy's goals and objectives - Within the policy measures or strategies -Elsewhere in the document	-Programme type	- Responsibilities	-Not clear
Child Development Policy (Ministry of Community Development, Women Affairs and Children)	1996 (revised in 2008)	Hardly (once or twice)	-Safety of mother and infant -Care for mother and infant	-Within the policy statements -Elsewhere in the document	(Not mentioned as a policy strategy)	- Responsibilities	-Not clear
Community Development Policy (Ministry of Community Development, Women Affairs and Children)	1996 (has not been revised since then)	Hardly (once or twice)	-Care for mother and infant	-Elsewhere in the document	(Not mentioned as a policy strategy)	- Responsibilities	-Not clear

National Population Policy (Ministry of Planning, Economy and Empowerment)	1992 (revised in 2006)	Quite good (more than four times)	-Antenatal care and reproductive health services -Nutrition of women and children -Infant mortality	- Within the policy's goals and objectives - Within the policy measures or strategies	-Combination of programmes and regulations	- Responsibilities -Roles	-M&E Plan -Nutrition indicators
National Research and Development Policy (Ministry of Communication Science and Technology)	2010	Not at all	(Does not mention the issue of maternal or child health / nutrition)	NA	NA	NA	NA
National Policy on HIV/AIDS (Prime Minister's Office)	2001	Hardly (once or twice)	-Prevention of Mother- to-Child Transmission (PMTCT) -Care for people living with HIV	-Within the policy measures or strategies -Elsewhere in the document	-Programme	-Roles and Responsibilities	-M&E Plan
Women and Gender Development Policy (Ministry of Community Development, Women Affairs and Children)	2000	Hardly (once or twice)	-Care and maternal health -Safe motherhood	-Elsewhere in the document	(Not mentioned as a policy strategy)	-Roles and Responsibilities	-Not clear
National Nutrition Strategy July 2011/12 - June 2015/16 (Ministry of Health and Social Welfare)	2011	Quite good (more than four times)	-Breast and complementary feeding -Diseases -Nutrition education -Foetus/infant growth and development -Maternal care &nutrition -Child nutrition	-Within the policy's goals and objectives -Within the policy measures or strategies -Elsewhere in the document	-Programme type	-Roles and Responsibilities -Targets -Timeline	-M&E Plan -Nutrition indicators -Routine data collections procedures
National Strategy for Growth and Reduction of Poverty (**MKUKUTA** I & II)	MKUKUTA I (2005) MKUKUTA II (2010)	(Not directly mentioned – but to some extent implied	-Food insecurity -Diseases -Nutrition education -Dependency ratio	-Within the policy measures or strategies -Elsewhere in the document	-Programme	(Not specific or related to the 1000 Days)	(Not specific or related to the 1000 Days)

(Vice President's Office)		indirectly)	-Child growth and development, -Maternal nutrition				
The National Road Map Strategic Plan To Accelerate Reduction of Maternal, Newborn and Child Deaths in Tanzania2008 – 2015 (Ministry of Health and Social Welfare)	2008	Quite good (more than four times)	-Maternal and Infant morbidity and mortality -Maternal and child nutrition -Antenatal and postnatal care services -PMTCT -Family planning -Proper breast feeding practices	-Within the policy's goals and objectives -Within the policy measures or strategies -Elsewhere in the document	-Both Programmeand Regulatory type	-Roles and Responsibilities -Targets -Timeline	-M&E Plan -Nutrition and health indicators -Routine data collections procedures
The Tanzania Development Vision 2025 (Planning Commission)	(data not indicated)	Not at all	(Does not mention the issue of maternal or child health / nutrition)	NA	NA	NA	NA

Key:

*Extent to which the issue has been directly stipulated in the policy document:

1. None at all
2. Hardly (once or twice)
3. Fairly good (three to four times)
4. Quite good (More than 4 times)

****Where has 'the need to improve health & nutrition at the 1000 days' been stipulated in the policy document

1. Within the policy's vision/mission/goals/aims/objectives
2. Within the policy statements
3. Within the policy measures or strategies
4. Somewhere else in the document
5. Nowhere in the document

*****If mentioned as a policy measure or strategy, what type of policy measure is it?

1. Regulatory type (e.g. rules and regulations)
2. Programme type (e.g. special schemes/programmes/projects)
3. Combination of both regulatory and programmes types

******Cross cutting issues addressed by policy measures to improve health & nutrition at the 1000 days?

- Gender: statements on men and women in different age groups/their roles
- HIV/AIDS: Prevention, treatment, support
- Environment: environmental conservation issues
- Governance and accountability, mechanisms
- Poverty

Appendix 2: Tool for Assessment of Health Facilities in Morogoro Region

A. Background information and general characteristics of the health facility

Name of the health facility: .....

Type (circle the applicable):

i) Hospital
ii) Health Center
iii) Dispensary

Ownership (circle the applicable):

i) Government
ii) Private
iii) Religious organization
iv) Non-Religious Organization

Range of services provided (choose all the applicable):

i) ANC
ii) Immunization
iii) Delivery
iv) Referral cases

B. Situation of the health facility

1. Facility infrastructure

Type of infra-structure	**Available**	**Not available**
Electricity		
Tap Water		
Telephone (landline)		
Telephone (cellular)		
Radio call		
Emergency transportation/Ambulance		
Laboratory		
Computer		
Internet connection		

2. Availability of Maternal and Child Health Services

Type of service	**Available**	**Not available**
Pre-natal care:		
• Vaccination		
• PMTCT		
• SP provision (anti-malaria)		
• Deworming		
• Provision of Iron and Folic Tabs		
• Provision of treated Mosquito bed nets		
• Assessment of Hb levels		
• Urine testing		
• Weight measuring		
• Height measuring		
• Physical assessment of pregnant women		
• Blood pressure		

Delivery service		
Infant Immunization		
Growth monitoring		
Family planning services		
Post-delivery follow-ups		

3. Availability of Nutrition related services provided to mothers and children

Type of service	**Available**	**Not available**
Nutrition Education and counselling		
Rehabilitation of severely malnourished children		
Mid-Upper Arm Circumference (MUAC) measurement		

4. Availability of functional equipment

Functional equipment	**Available**	**Not available**
Microscope		
Weighing scale		
Length board		
MUAC tapes		
Haemocue		
Refrigerator		
Cool boxes		
Generator		
Ambulance		
Tallquest (Hb testing)		

5. Availability of nutrition related Information and Education Communication (IEC) materials

Material	**Available**	**Not available**
Brochures / Leaflets (specify)		
Posters (specify)		
Guidelines/Job aids (e.g. management of malaria, anaemia, severe malnutrition) – specify		
TV/Video set		
LCD Projector		
Books (specify)		
Nutrition Magazines (specify)		
Teaching Tools (writing boards, flip chart stands, etc) – specify		

6. Availability of institutional infra-structure

Structure	**Available**	**Not available**
Health facility committee		
Community Health committee		
Community Nutrition committee		

7. Staffing and staff qualifications

Staff cadre	**Number**	**Qualification**
Medical Doctor		
Assistant Medical Officer		
Clinical Officer		
Clinical Assistant / RMA		

Nursing Officer		
Medical Attendant		
RCH Aid		
Laboratory Technician/Assistant		
Others (specify)		

C. Situation of Low Birth Weights among Women giving Birth in the Facility ***(****Refer to* ***Rejesta ya Wajawazito*** *and* ***Rejesta ya Wazazi)***

- Total number of women attended in Year 2012 (Jan – Dec): …….

- Number of Low Birth Weight cases in Year 2012 (Jan- Dec): ……...

Appendix 3:Tool for assessment of Government'ssocio-political commitment to fighting undernutrition- Expert perception survey

Q1. In your opinion, how important are child undernutrition problems in the country/Morogoro Region?

1 Highly critical
2 Important
3 Somewhat important
4 Of limited importance
5 Unimportant
6 Don't know
99. Refrain to answer

Q2. In your opinion, what kind of a priority does your national government give to improving nutrition outcomes?

1. Very high priority	
2. High priority	
3. Moderate priority	
4. Low priority	
5. Very low priority	
6. Don't know	
99. Refrain to answer	

Government policies

Q3. Could you name those policies that the national government considers most relevant and currently undertakes to reduce undernutrition of children (name up to 5)?
For each,

A. Can you tell whether it was initiated by the implementing agency?
B. If not, can you identify which agency initiated the policy?

Name of policy	3A. To what extent was this policy initiated by the State agency responsible for executing it?	3B. If not fully or mostly, what other agency drove this policy?*
	1. Fully 2. Mostly 3. Somewhat 4. Hardly 5. Not at all 6. Don't know 99. Refrain to answer	
1.		
2.		
3.		
4.		
5.		

* Consider agencies within/outside government, including Development Partners

Q4. For the policies you mentioned in question 3, could we ask you a few more questions?

A. How important does the National government consider this policy?
B. How sufficient are current National government efforts towards fulfilling policy goals?

Name of policy	4A. How important does the National government consider this policy? 1. Very important 2. Important 3. So-so 4. Unimportant 5. Very unimportant	4B. How adequate are National government efforts towards fulfilling policy goals? 1. Very sufficient 2. Somewhat sufficient 3. So-so 4. Somewhat insufficient 5. Very insufficient
1.		

2.		
3.		
4.		
5.		

Stakeholders

Q5. In your opinion, how well do National government agencies[5] responsible for designing/implementing these policies build broad-based social and political support in order to ensure their success and longevity?

	Agencies designing	Agencies implementing
1. Very strongly		
2. Strongly		
3. So-so		
4. Weakly		
5. Very weakly		
6. Don't know		
99. Refrain to answer		

Q6. In your opinion, what levels of support do National government efforts towards improved **nutrition** receive from (interviewer: circle response for each category):

	Very strong	Strong	Moderate	Weak	Very weak	Don't know	Refrain to answer
The general public	1	2	3	4	5	6	99
Civil society groups	1	2	3	4	5	6	99
Central Government	1	2	3	4	5	6	99
Political opposition	1	2	3	4	5	6	99
Civil Service	1	2	3	4	5	6	99
International donors	1	2	3	4	5	6	99
Private sector	1	2	3	4	5	6	99
Media	1	2	3	4	5	6	99

Analysis, learning and adaptation

Q9. How clearly are public policy preferences aiming to address undernutrition set out in national government documents?

1. Very clearly
2. Clearly
3. Somewhat
4. Unclearly
5. Very unclearly
6. don't know
7. 99 Refrain to answer

Q10. How well are the goals of improving nutrition outcomes expressed in national development strategy (Five Year Plans; Vision 2025; MKUKUTA, etc)?

1. very strongly	
2. strongly	
3. so-so	
4. weakly	
5. negligibly/not at all	
6. don't know	
99. refrain to answer	

[5] Agencies designing policy refer to both state and national government bodies. The question on implementation can consider non-government bodies

Q11. How well are budget lines related to nutrition developed in the State budgets?

1. very clear	
2. clearly	
3. somewhat clearly	
4. unclear	
5. very unclear	
6. don't know	
99. refrain to answer	

Q12. How important is scientific evidence in national level nutrition policymaking processes?

1.very important	
2. important	
3. so-so	
4. unimportant	
5. very unimportant	
6. don't know	
99. refrain to answer	

Q13. How developed are national government systems generating knowledge and evidence (regular monitoring and surveillance; M&E, etc) for informing nutrition policy?

1. Strongly developed	
2. Developed	
3. Somewhat	
4. poorly developed	
5. non existent	
6. Don't know	
99. Refrain to answer	

Q14. How accessible is national government policy (aiming to address undernutrition reduction) to public scrutiny (by citizens, civil society, media, etc)?

1. Fully accessible	
2. Fairly accessible	
3. So-so	
4. Fairly inaccessible	
5. Inaccessible	
6. Don't know	
99. Refrain to answer	

Leadership

Q7. In your opinion, to what extent do *senior* political leaders, civil society representatives and civil servants leaders at the national level speak out publicly against undernutrition?

Political leaders	Civil society	Civil servants

1. Very strongly
2. Strongly
3. So-so
4. Weakly
5. Very weakly
6. Don't know
99. Refrain to answer

Q8. In your opinion, how convincing are public statements made by *senior* a) politicians b) civil society representatives and c) civil servants at the national level in relation to reduction of undernutrition?

Political leaders	Civil society	Civil servants

1. Highly convincing
2. Convincing
3. So-so
4. Not very convincing

5. Highly unconvincing
6. Don't know
99. Refrain to answer

Q15. In your opinion, what level of empirical understanding do *senior*: a) politicians; b) civil society representatives; and c) civil servants at the national level have of the:

a) Status of undernutrition in the country
b) Causal factors and
c) Potentialsolutions?

	Status	Causal factors	Potential solutions
Senior politicians			
Senior civil servants			
Civil society leaders			

1. Very high
2. High
3. Moderate
4. Weak
5. Very weak
6. don't know 99. Refrain to answer

Budgets

Q16. To what extent are national government policy preferences for addressing nutrition reflected in its budget allocations and expenditures?

	a. allocation	b. expenditure
1. Very strongly		
2. Strongly		
3. So-so		
4. Weakly		
5. Very weakly/not at all		
6. Don't know		
99. Refrain to answer		

Q17. In your opinion, how well has the national government developed transparent financial mechanisms for earmarked nutrition funding?

1. Very strongly	
2. Strongly	
3. So-so	
4. Weakly	
5. Very weakly/not at all	
6. Don't know	
99. Refrain to answer	

Institutional incentives

Q18. As nutrition issues are typically relevant to multiple departments/agencies, how successful has the system been in delivering a coordinated cross-agency **approach** to addressing nutrition?

1. Very successful	
2. Successful	
3. So-so	
4. Quite unsuccessful	
5. Unsuccessful	
6. Don't know	
99. Refrain to answer	

Q19. In your opinion, what is the strength of coordination efforts by national government with sub-national (e.g. District Councils) government efforts to improve nutrition outcomes?

1. Very strong	
2. Strong	
3. So-so	

4. Weak	
5. Very weak	
6. Don't know	
99. Refrain to answer	

Q20. For national government *agency/agencies* in charge of a) designing and b) implementing nutrition policy, is achievement or failure to achieve public policy objectives credibly rewarded or sanctioned (e.g. through budget rises/cuts; win/loss of political gravitas; gain/loss of respect, etc)?

	Policy design agencies	Implementing agencies
1. Always		
2. Mostly		
3. Sometimes		
4. Occasionally		
5. Never		
6. Don't know		
99. Refrain to answer		

Q22. Similarly, for *individuals* within the national government agencies in charge of a) designing and b) implementing undernutrition policy, is achievement or failure to achieve public policy objectives credibly rewarded or sanctioned (e.g. through promotions, training opportunities; budget rises/cuts; win/loss of political gravitas, etc)?

	Policy design agencies	Implementing agencies
1. Always		
2. Mostly		
3. Sometimes		
4. Occasionally		
5. Never		
6. Don't know		
99. Refrain to answer		

Q23. In your opinion, to what extent does the national government **enhance** a) administrative capacity and b) financial capacity within the country to effectively address nutrition problems in the country?

	Administrative capacity	Financial capacity
1. Very strongly		
2. Strongly		
3. So-so		
4. Weakly		
5. Very weakly		
6. Don't know		
99. Refrain to answer		

Q24. In your opinion, to what extent does the national government **utiliseexisting** a) administrative capacity and b) financial capacity to effectively address nutrition in the country?

	Administrative capacity	Financial capacity
1. Very strongly		
2. Strongly		
3. So-so		
4. Weakly		
5. Very weakly		
6. Don't know		
99. Refrain to answer		

Appendix 4: Policy review guide

NAME OF POLICY: .....

A. When was this public policy formulated / Approved /revised?

B. To what extent 'the need to improve health & nutrition at the 1000 days ' has been directly stipulated in the policy document?

1. None at all
2. Hardly (once or twice)
3. Fairly good (three to four times)
4. Quite good (More than 4 times)

C. What aspects/issues of health and/or nutrition of the 1000 days have been mentioned / stated / addressed

1. Malnutrition
2. Breastfeeding and complementary feeding
3. Diseases
4. Nutrition knowledge/awareness/education
5. Care
7. Foetus/infant growth and development
8. Maternal nutrition

D. Where has 'the need to improve health & nutrition at the 1000 days' been stipulated in the policy document?

1. Within the policy's vision/mission/goals/aims/objectives
2. Within the policy statements
3. Within the policy measures or strategies
4. Somewhere else in the document
5. Nowhere in the document

E. If 'the need to improve health & nutrition at the 1000 days' is mentioned as a policy measure or strategy, how best can it be categorized (i.e. type of policy measure)? Not mentioned

1. Regulatory type (e.g. rules and regulations)
2. Programme type (e.g. special schemes/programmes/projects)
3. Combination of both regulatory and programmes types

F. What cross cutting issues are addressed by policy measures to improve health & nutrition at the 1000 days?

- Gender: statements on men and women in different age groups/their roles
- HIV/AIDS: Prevention, treatment, support
- Environment: environmental conservation issues
- Governance and accountability, mechanisms
- Poverty

G. Does the policy include operational plans and programmes of work that are covering such matters as goals and targets, timelines and deliverables; roles and responsibilities for those involved; identifying the capacity needs and areas of competencies required for the workforce (including evaluation);

- Goals/targets
- timelines
- deliverables
- Roles/responsibilities

- Capacity needs
- Competency

H. Do policy measures for improving health & nutrition at the 1000 days include the following:

- Monitoring & Evaluation
- M&E plan
- Nutrition indicators
- Routine data source
- Who
- What
- When
- Place