Reaching Agents of Change (RAC)

ADVOCACY AND COMMUNICATION STRATEGY

Dar es Salaam, Tanzania

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ACKNOWLEDGMENT

ACRONYMS AND ABBREVIATION

ACF	-	Advocacy Coalition Framework
AED	-	Academy for Educational Development
BCC	-	Behavior Change Communication
BMI	-	Body Mass Index
COUNSENUTH	-	Centre for Counseling, Nutrition and Health Care
CSOs	-	Civil Society Organizations
DPs	-	Development Partners
EAC	-	East Africa Community
EDP	-	Essential Drugs Program
EPI	-	Expanded Program on Immunization
FAO	-	Food and Agriculture Organization
FNPT	-	Food and Nutritional Policy for Tanzania
HKI	-	Hellen Keller International
IDA	-	Iron Deficiency Anaemia
IDD	-	Iodine Deficiency Disorders
MAFC	-	Ministry of Agriculture, Food and Cooperatives
MoHSW	-	Ministry of Health and Social Welfare
NARS	-	National Agricultural Research System
NBS	–	National Bureau of Statistics
NNS	–	National Nutrition Strategy
NNSC	-	National Nutrition Steering Committee
OFSP	-	Orange Fleshed Sweet Potatoes
PED	-	Protein Energy Deficiency
PLWHAs	-	People Living With HIV and AIDS (PLWHAs)
PMO-RALG	-	Prime Minister's Office – Regional Administration and Local Government
SASHA	-	Sweetpotato Action for Security and Health in Africa
SCT	-	Social Cognitive Theory
TAFSIP	-	Tanzania Agriculture and Food Security Investment Plan
TASPA	-	Tanzania Salt Producers Association
TDHS	-	Tanzania Demographic and Health Survey
TFNC	-	Tanzania Food Nutrition Center
THDR	-	Tanzania Human Development Report
TMC	-	Transtheoretical Model of Change (TMC
TRCHS	-	Tanzania Reproductive and Child Health Survey
UNDP	-	United Nations Development Programme
UNICEF	-	United Nations Children's Fund
URT	-	United Republic of Tanzania
VACs	-	Vitamin A Capsules
VAD	–	Vitamin A Deficiency
VAS	-	Vitamin A Supplementation
WFP	-	World Food Programme
WFSP	-	White Fleshed Sweet Potatoes
WHO	-	World Health Organization

INTRODUCTION

1.1 BACKGROUND

Tanzania is an East African country, bordering the Indian Ocean on the east, Uganda and Kenya on the north, Burundi, Rwanda, and Congo on the west, and Mozambique, Zambia, and Malawi on the South. It has a total area of 945,090 sq. km and land area of 886,040 sq. km equivalent to 94.5 Million hectors and its agricultural land in Tanzania is about 40.08 percent of its total land area equivalent to 44.0 Million hectors[1] and only about 6.7% of the cultivable land about 9.5 million hectors in use (URT, 2011). The population of Tanzania was estimated at 41 million people in 2009 (NBS, 2010) and its growth rate estimated at 2.002%.[2] It is estimated that 51% of the population live on less than $1 a day; and that about half or 42% of these live in absolute poverty on less than $0.75 cents a day (UNDP, 2000)

Access to basic health care is increasing overtime in Tanzania, with records showing that while by 2000 the government was only able to provide finance that meets only a third (1/3) of the requirement of the public health system (Brown, 2000), overtime the budget for health care and efforts to increase access and utilization have significantly increased. For example between 1999 and 2004 there were important improvements in Tanzania's health system, including doubled public expenditure on health; decentralization and sector-wide basket funding; and increased coverage of key child-survival interventions, such as integrated management of childhood illness, insecticide-treated nets, vitamin A supplementation, immunization, and exclusive breastfeeding (Masanja et al, 2008). However it is still observed that health services are often not well accessed by the very poor and by women in particular. Some of the most typical barriers to access and utilization are health care charges, long distances to facilities, inadequate and unaffordable transport systems, poor quality of care, and poor governance and accountability (Mamdani & Bangser, 2004)

Tanzania's concerted efforts in poverty reductions are starting to pay dividend, with findings showing that while in 1983, sixty five percent (65%) of rural Tanzanians were living below the poverty line, in 1991 the number has receded to 50.5% (Ferreira, 1996) and the proportion of the population below the basic needs poverty line has declined overtime to 33.6% in 2007, while the incidence of food poverty was at 16.6% over the same period (PHDR, 2011). However, the country is still at a low human development category, with life expectancy at birth 58.2 (UNDP, 2011)

[1] Ministry of Agriculture, Food Security and Cooperatives, accessed 2nd June 2012 at http://www.kilimo.go.tz/help.htm

[2] Index Mundi – Tanzania Population Profile 2012 accessed on 2nd June 2012 at http://www.indexmundi.com/tanzania/demographics_profile.html

In Tanzania, “around three-quarters of the population depend on under-developed smallholder primary agricultural production for their livelihoods” (PHDR, 2011: xv). Unfortunately, the brunt of climate change is expected to be borne also by Tanzania because of its large agricultural sectors especially because agricultural production is weather sensitive and adaptive capacities are low. For example, under some high-emission projections, where rainfall decreases by up to 15% and there is no adaptation, average maize yields could decrease by up to 16% by 2030 (a loss of around 1 million tones/year) and 25-35% by 2050 (2 to 2.7 million/tones per year). Loss of agricultural production will exacerbate the incidence of income poverty, food insecurity and malnutrition. While the country has recorded consistent self-sufficiency in food production, with the peak being in 2007 with 112%, some regions continue to experience food shortages and at the moment only 23% of all households in rural mainland of Tanzania are food secure (ibid.)

1.2 SITUATION ANALYSIS

The infant and under five child mortality rate is sadly still very high in Tanzania at 51 and 81 per 1000 live births respectively (NBS & ICF Macro, 2011). This situation implies that five out of every 100 children die before the first birthday and that 8 out of 100 children die before their fifth birthday. Unfortunately, chronic malnutrition is widespread with 42 percent of children aged less than five years in Tanzania stunted, making it one of the 10 worst affected countries in the world and eight out of ten infants and six out of ten under fives are anemic (ibid). Furthermore, over 40 percent of children do not have access to adequately iodized salt thus increasing the risks that they will suffer intellectual impairment. Malnutrition is estimated to contribute to 35% of all under five deaths in Tanzania (ibid.)

It has also been established that the nutritional status of women is alarming, with about 40 percent of women of child bearing age anaemic. Despite a substantial number of women being anaemic, only about 4 percent of them took the recommended iron and folic acid daily dosage for 90 or more days during their most recent pregnancy. Furthermore, more than one in ten are thin (with body mass index (BMI) of less than 18.5 kg/m^2). Inequities in nutritional status continue to persist, with most malnourished children and women living in rural areas (ibid.)

1.3 NUTRITION PROFILE OF WOMEN AND CHILDREN IN TANZANIA

While some studies have shown that in some parts of Tanzania, a comparison of rural and urban areas do not show significant differences in number of household’s meals consumed a day, there are however, significant differences of quality, type, access and utilization across gender and age demarcations. For instance, in a study comparing rural and urban Dar es Salaam, it was found out that, all urban and 92% of rural subjects had three daily meals, and snacks were as commonly eaten in both areas of the survey (Mazengo, et al. 1997). Again, while calories intake between men and women of all ages has often shown no disparities, female disadvantage in

micronutrient intake is, however, frequent in most countries, with pregnant and lactating women of more disadvantaged relative to both men and other women (DeRose & Millman, 2000). This appear to be the case also in Tanzania as underweight among women of reproductive age of Dar es Salaam, for instance showed only a modest decline from 3.3% in 1995 to 2.6% in 2004 (Villamor et al. 2006).

Anaemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. In Tanzania, prevalence of anemia among children is 59% with 27% among them mildly anemic, 29% moderately anemic and 2% severely anemic, while the rate in women is lower than that of children, but still a significant public health risk, with 40% percent women anemic, 29% percent of them mildly anemic, 10% moderately anemic and 1% severely anemic (TDHS, 2010 op cit). This national average should be received with caution because there is a likely hood of regional variation. For example a study found that in Dar es Salaam, 49% of women of reproductive age but not pregnant were anemic with 1.6% of them severely anemic (Massawe et al. 2002), while another study conducted in Rufiji among pregnant women found that 58% were anemic and 6.8% were severely anemic (Urassa, et al. 2002)

Furthermore, "malnutrition is one of the greater challenges facing Tanzania. Over the past decade over 600,000 children aged below 5 years are estimated to have died as a result of inadequate nutrition." (Hivos et al, 2010:1) In 2010 alone, 43,000 children were likely to die prematurely because of malnutrition, which averages to one child dying every 12 minutes (ibid.) The malnutrition of children is a serious problem in Tanzania and a manifestation of not only poverty and food insecurity but also of the poor nutrition of women of reproductive age (PHDR, 2011:73).

When we look at stunting which reflects inadequate height for age and is an indicator of chronic under nutrition, wasting which is inadequate weight for height and underweight which reflects inadequate weight for age (UNICEF, 2010), Tanzania's children fall short of ideal standards. With underweight prevalence at 12% in urban areas and 18% in rural areas (ibid.) on average, Tanzanian children in rural areas suffer substantially higher rates of malnutrition than urban children" (PHDR, 2011 op cit)

Except for Dar es Salaam where the stunting level is under 20%; Kilimanjaro between 20% to 29%, and Pwani, Singida, Tabora, Mwanza and Mara where the stunting level is 30% to 39%, for the rest of the regions in Tanzania, children stunting levels are at an alarming of 40% and above (PHDR, 2011 op cit.). Findings show that, across the country, 42 percent of children under 5 have low height-for-age or are stunted, 5 percent have low weight-for-height or are wasted, and 16 percent have low weight-for-age, factors which indicate both chronic and acute under nutrition (TDHS, 2010). However, there are regional disparities as far as child nutrition is concerned with children in the Central and Southern Highlands zone appearing to be particularly disadvantaged,

because at least half are stunted, which reflects long-term under nutrition in the area (TDHS 2010, op cit.)

Again, maternal nutrition during the pre- and postnatal periods is extremely important for the outcome of pregnancy as well as infant feeding. A good and adequate balanced diet, as well as vitamin and mineral supplementation, improves birth outcome and maternal well-being. (TDHS 2004/05): However, maternal under nutrition is very common in the Tanzania leading to Anaemia, VAD, and other nutritional disorders such as underweight status that contributes to poor maternal health and birth outcomes. Overall, 10% of Tanzanian women of reproductive age (15–49 years) are considered to be undernourished, having a Body Mass Index (BMI) of less than 18.5. Studies have indicated that women living in rural areas are more affected compared to those living in urban areas (TDHS 2004/05)

Maternal under-nutrition is often reflected in the proportion of children born with low birth weight (below 2.5 kg). Representative data on the prevalence of low birth weight babies is not readily available but estimates from UNICEF suggest that 10% of Tanzanian newborns are low birth weight. Pregnant women are particularly vulnerable to anaemia due to increased requirements for iron and folic acid. According to TDHS (2004/05), 48% of women aged 15-49 years were found to be anaemic, whereas 58% of pregnant women and 48% of breast-feeding mothers were anaemic. Ten percent of pregnant women took iron tablets for at least 90 days, while about half (52%) took iron tablets for less than 60 days, and 38% did not take iron tablets at all. Hemorrhage is the most frequent cause of maternal deaths, and pregnant women who are anaemic are more vulnerable to postpartum hemorrhage (TDHS, 2010).

This synopsis shows that Tanzania continues to struggle with unacceptable rates of macro and micro nutrient deficiencies especially among women and children, and that as the number of food-insecure households remains high, the nation needs to consider food based approaches that will provide a food safety net and to fight under nutrition, hence the introduction of OFSP as a viable and effective food security measure and nutritionally valuable because of its health benefits of high vitamin A content.

1.4 PATTERNS OF NATIONAL DIETARY PRACTICES

Agriculture is the livelihood pillar of majority of Tanzanians with most households practicing subsistence based farming producing primarily maize, cassava, paddy, sorghum/millets, bananas, sweet potatoes, yams, and many other foods. The dominance of particular food crops and food related consumption preferences varies based on regions and sometimes even tribes. However, as is the case most of the East and Southern African region (Blackie, 1990) maize is the major food staple crop across the nation.

The main dish in Tanzania is Ugali , a type of cornmeal made of maize flour cooked with water into a stiff porridge and eaten with beef, fish, vegetables, yoghurt, chicken and many other possibilities. Ugali can also be prepared from cassava flour, banana flour and etc. Only a few families particularly those in urban areas afford and regularly consume animal protein (Mazengo 1997, op cit). Again, typical infant weaning food especially for people in low income households and in rural areas is protein cereal based porridge, maize flour most commonly and cow milk to a certain extent, while a weaning diet should reach the nutritional requirements for the growing child, and contain a variety of foods and drinks (Davenport et al. 2004)

An examination of consumption of nutritious items shows that 78% of people consume fruits and 98% consume vegetables (Ruel, et al. 2005). While fruits and vegetable consumption has clear health and nutrition benefits and good sources of essential micronutrients including vitamin A as well good protection against chronic diseases (ibid.), sufficient consumption to the required health amount is questionable. For various reasons, including high costs especially in urban areas, also that vitamin A rich vegetables and fruits are seasonal; as such their perishability is a limitation for consistence consumption around the year.

Although sixty-one percent (61%) of the youngest children age 6-59 months who are living with their mother received a vitamin A supplement by 2010 (TDHS, 2010), when you look at the situation depicted in the nutrition profile above, it is clear that overall the quality of food consumed by women and children is nutritionally inadequate and appropriate intervention expedient. OFSP is highly rich in vitamin A content and can be available throughout the year providing a rare type of healthy and nutritious food.

In Tanzania, irish potatoes, white fleshed sweet potatoes (WFSP) and varieties of orange fleshed sweet potatoes(OFSP) are locally (traditionally) cultivated and consumed in some parts of Tanzania, with irish potatoes and WFLS potatoes most common. Some of the varieties of the OFSP are popularly known as viazi jeshi in Songea region. Across the nation however, unfortunately for most part the production and consumption of orange fleshed varieties rich in pro-vitamin A is not common.

With low basic understanding of consequences of Vitamin A deficiency, inadequate awareness of the health benefits of vitamin A, and limited knowledge of vitamin A rich food, vegetables and fruits, horticultural and nutritional education intervention is necessary while food-based vitamin A programs have more likelihood of making sustainable improvements in knowledge and dietary practices (Kidala et al. 2000)

1.5 DETERMINANTS OF MALNUTRITION AND FOOD INSECURITY IN TANZANIA

Like other developing countries including Tanzania, the main health and nutrition challenges are related to undernourishment rather than over- nutrition as protein-energy-deficiency (PED), iron deficiency anaemia (IDA), iodine deficiency disorders (IDD) and vitamin A deficiency (VAD). These conditions are mainly affecting under fives and pregnant women (TDHS, 2010). Studies have indicated that malnutrition results directly from inadequate dietary intake and infectious diseases caused by food insecurity at household, village, community and national level. Apart from intake of sufficient amount of quality food, other determinants of nutrition security in Tanzania has been identified as parents' education, health status of individuals, and effective communication of information (Leach & Kilama, 2009).

In Tanzania food insecurity is mainly caused by problem related to food production, harvesting, preservation, processing, distribution, preparation and use. Other factors may include; inadequate maternal and child care, poor access to health services, and an unhealthy environment. It is evident that all these factors may directly or indirectly contribute to malnutrition. However lack of knowledge and poverty is the root cause of all of these problems due to its direct impact on the ability of individuals, households, communities and nations to meet their needs and obligations for a healthy and nutrition and prolonged life of the people in the country (URT 1992).

Apart from these deficiency disorders, there are two nutrient excess disorders represented by fluorosis in the northern and north-western and central parts of mainland; and the problem of overweight, obesity and diet-related non-communicable diseases which seem to be increasing especially in the urban elite and business sections of the community emulating unhealthy food habits and lifestyles(FNC, 2011). According to the 1999 Tanzania Reproductive and Child Health Survey (TRCHS), 5% of the children below five years were wasted, 44% stunted and 29% underweight. Furthermore, the national survey on Vitamin A conducted in 1997 showed that 24.2% of the children under -five years of age had VAD (URT, NNS, 2011).

However, nutrition indicators for under-fives have shown some signs for improvements in the recent years but under nutritional disorders are still rampant in the country. Stunting, underweight status and wasting among children aged 0-59 months have reduced from 44%, 29.5% and 5.3% in 1999 to 38%, 21% and 3.7%, 42%, 16% and 3.8 in 2005 and 2010 respectively. Anaemia is also highly prevalent among under-fives with 72% of all 6-59 months children being anaemic. The main causes of anaemia are nutritional deficiency, intestinal worms and malaria (THDS, 2010).

Table 1: Indicators of child Malnutrition, 1999, 2005 and 2010

Year	Stunting (height for age below 2SD)	Underweight for age below 2SD	Weight -wasting for height below-2SD
1999	44%	29.5%	5.3%
2005	38%	21.9%	3.7%
2010	42%	16%	3.8%

Sources: MKUKUTA Implementation Report, 2010

The TDHS 2010 also indicated that adolescent girls and women nutritional status is still alarming (URT, 2011). Around one third of the women aged 15 -49 years are iron, Vitamin A and Iodine deficient, two thirds of women are anaemic and one ten are still undernourished while the data for over nutrition is not available.

Table 2 : Health Challenges for Children and Women in Tanzania

Children age less than 5 years	%	Women	%
Stunting[1]	42	Low Body mass index	11
Underweight[1]	16	Iodine Deficiency	36
Anaemia2	69	Anaemia	40
Iron Deficieny[2]	35	Iron deficiency	30
Vitamin A Deficiency[2]	33	Vitamin A deficiency	37

Source: TDHS 2010, TDHS Micronutrients 2010. [1]Children 0- 59 months. [2] Children 6-59 months

As seen in the two tables above, the data are so appalling and as such some of the consequences of these malnutrition disorders for adolescent girls and women include giving low birth weight for infants, production of anaemia babies and transfer of malnutrition disorders from generation to another. Due to this intergenerational transfer of malnutrition by girls and women, we argue that this is a very serious problem the government of Tanzania and other stakeholders have to immediately address if the country is to achieve its National Vision 2025 of attaining the middle income level by 2025 that also requires health and very productive citizens.

1.6 CURRENT POLICY TREND AND STRATEGY

Malnutrition and other nutritional disorders are still critical challenges in Tanzania, accordingly the Government of Tanzania, development partners and other stakeholders have put in place many nutritional improvement interventions. These are guided by many national policies implemented through various programs which aim to address the chronic problem of malnutrition directly or indirectly.

While there is a clear political will, and most recently reflected in Tanzania's commitment to successful implementation of the Scaling Up Nutrition initiative[3], Premier Mizengo Pinda officially launched the food program in October 4, 2011. Meanwhile there are still milestones to cover before the ideal nutritional status and profile across the nation becomes of acceptable standard.

Among most recent developments as far as nutrition is concerned in Tanzania, the exclusive significance is the high level national meeting held on 12th June 2011 between the Prime Minister of Tanzania, US Foreign Secretary and the Deputy Prime Minister for Ireland, and the government of Tanzania committed and achieved significant steps in achieving the following key items.

- The National Nutrition Strategy has been developed and launched since 2011
- The implementation guidelines for the National Nutrition Strategy (NNS) has been prepared and it has clear responsibilities for the Ministries, Development Partners (DPs), the Private sector and Civil society;
- A new High Level Steering Committee to Scale up nutrition (HCSN)[4] has led by Government with participation from selected DPs and CSOs has been established. Composite members of the NNSC are, the PMO, MoHSW, MAFC, Ministry of Community Development, Gender and Children (MCDGC), Ministry of Education and Vocational Training (MEVT), Ministry of Regional Administration and Local Government (MRALG), Private Sector with members Bakhresa Food Products and Power Foods proposed under the Confederation of Tanzania Industries (CTI), Development Partners in particular USAID, international Organizations in particular UNICEF, NGOs in particular Partnership for Nutrition in Tanzania (PANITA) supported by Save the Children and the Centre for Counseling, Nutrition and Health Care (COUNSENUTH) supported under Africare
- Effective in FY 2012/13, MoF to establish of a designated line in the national budget for nutrition.
- Stronger integration of nutrition into agriculture activities as outlined in the Tanzania Agriculture and Food Security Investment Plan (TAFSIP).
- The PMO Regional Administration and Local Government (PMO-RALG) has instructed all districts to assign a Nutrition Focal Person.
- Gazetting, finalization and enforcement of the national standards for oil, wheat and maize flour that were set in 2010 so that millers could begin fortification of these food products. At the moment food fortification regulations have been gazetted by the government and are effective.

[3] see http://www.scalingupnutrition.org/sun-countries/africa/tanzania/

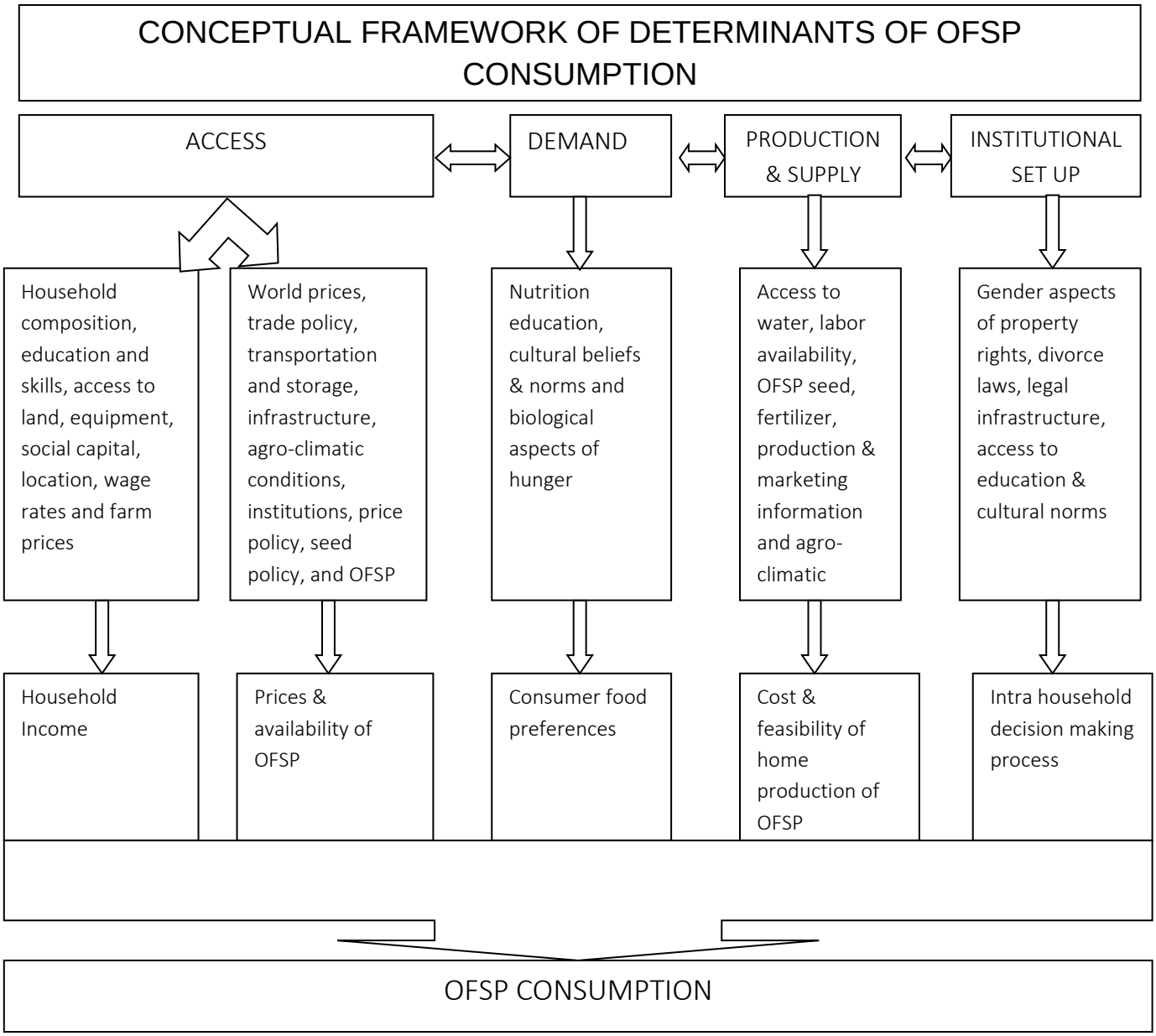
[4]Roles and responsibilities of the NNSC are stipulated in the National Nutrition Strategy (NNS) pg 42-43

The Food and Nutritional Policy for Tanzania (1992) and a National Nutrition Strategy (NNS) have been developed to guide actions to improve nutrition in the country, and these are a key indicator of the government's recognition of the malnutrition problem and desire to address it. The NNS has delineated that responsibility for implementing actions to improve nutrition to become multi-sectoral while lead sectors being health, education, agriculture and water/livestock sectors. There is a national steering committee that has been established to facilitate the implementation of the strategy and to tackle the problem of malnutrition in the country.

Hitherto, national efforts to control VAD have focused mainly on supplementation with almost exclusive emphasis on supplementation of children 6 to 59 months as the primary intervention. "The nationally targeted Vitamin A Supplementation (VAS) started in 1987 with the inclusion of vitamin A capsules (VACs) in kits distributed through the Essential Drugs Program (EDP) to government owned primary health facilities. To increase coverage, VAS was introduced into routine services of the Expanded Program on Immunization (EPI) in 1997 and the sub-national measles immunization campaigns in 1999 and 2000. Another approach—twice-yearly distribution during commemorative days—was inaugurated in 2001 during the Day of African Child in June and World AIDS Day in December." (AED et al. n.d:1).

The 'supplements approach' has had good results for certain and highly enhanced health of children. For example, vitamin A supplementation of a cohort of children 6 to 59 months old, in which 9% of the children were HIV-infected. Overall vitamin A supplements resulted in a 49% reduction in mortality [relative risk (RR), 0.51; 95% confidence interval (CI), 0.29 to 0.90, P = 0.02]. Vitamin A supplements reduced all-cause mortality by 63% among HIV-infected children (RR 0.37; CI 0.14 to 0.95, P = 0.04) and by 42% among uninfected children (RR 0.58, CI 0.28 to 1.19, P = 0.14). Vitamin A supplements were also associated with a 68% reduction in AIDS-related deaths (P = 0.05) and a 92% reduction in diarrhea-related deaths (P = 0.01) (Fawzi et al. 1999). However, as it has been noted above, so far only sixty one per cent (61%) of the youngest children age 6-59 months who are living with their mother received a vitamin A supplement by 2010 (TDHS, 2010 op cit)

While production and consumption of fruits and vegetables such as mangoes, papaya, and carrots is not uncommon, the consumption patterns are inconsistency because especially fruits are seasonal and regional based, and there are also financial implications to consumption. Although an outstanding source of vitamin A, and well placed to overcome most barriers of consumption, OFSP are not very common across the nation and therefore are not cultivated widely or consumed. Furthermore, there have not yet been decisive efforts to adopt and prioritize OFSP as a food based comprehensive, effective, efficient and sustainable strategy for combating VAD and for food security.



1.7 BARRIERS AND GATEWAY TO CONSUMPTION OF OFSP

Source: Adapted and customized from Ruel et al. 2005 op cit.

1.8 SUITABILITY FOR THE PRODUCTION, PROMOTION, AND CONSUMPTION OF OFSP IN TANZANIA

The competitive nutritious composition of OFSP varieties includes high levels of beta- carotene, a precursor to vitamin A, good source of energy, fiber, and other essential vitamins such as vitamin C, iron, vitamin B6, riboflavin, thiamine, magnesium and niacin (Betty, 2010) and research has established that regular intakes of about 125 grams per day of OFSP is certain to provide the recommended daily amount of vitamin A for children under-five years of age and pregnant or lactating women(Low et al. 2007)

OFSP also makes a very good food security crop because most of its varieties are drought resistant and can be stored for considerable periods without losing their quality or nutritious content depreciating, which make them ideal for the unpredictable climatic changes in Tanzania's primarily rain fed agricultural production. Like many other types of potatoes, their production is not labor intensive, which makes it possible to produce them throughout the year with little regard to climatic variations. On OFSP offering a variety of dishes, they also have multiple uses including the possibility of using them as a main ingredient in the production of several products such as bread, cakes, chips, drinks, starch, animal feed, flour, juice etc. (Betty 2010 op cit.) For these reasons, OFSP are strategically suitable if adopted as a sustainable and comprehensive strategy aiming to address twin problems of vitamin A deficiency and food insecurity (Betty, 2010 op cit).

While there have been concerns that in some parts of the Tanzania, sweet potatoes are shunned as female food and that adults prefer high dry matter content and the available OFSP varieties do not have, studies have established that OFSP is well accepted by children and has been successfully used to increase vitamin A status and reduce food insecurity in several food- based interventions (Hagenimana et al. 2001). Focusing on children and pregnant and lactating women, women in reproductive age, as well as people living with HIV (PLWHAs) and other infectious diseases might be a significant point of departure.

To combat VAD, sustained adoption is required for OFSP varieties that are adaptable to the agro-ecological zones within the country and which meet local preferences of farmers and consumers. Development of these materials through breeding, multiplication and dissemination is central to achieving the potential goal of food security and nutrition in Tanzania. According to FAO statistics, Tanzania has 76 percent of its land suitable for Sweet Potato production. Out of the

940,565 Sq km of land in Tanzania, 199,942 is moderately suitable, 264,595 sq km is suitable, while 246,265sqkm is highly suitable. Available data also indicates that only 8% of the land is not suitable for sweet potato production in the country. This means that a large part of the land resources in Tanzania is suitable for production of all types of Sweet potatoes including OFSP (see table below)

Table 1: Suitability of land for OFSP Production under Low input and rain fed conditions in Tanzania

	Areas in Square Kilometers (1Sq km = 100 ha)					% Area of Moderate to highly Suitable	% Area Marginally suitable
Not suitable	Marginally suitable	Moderately suitable	Suitable	Highly Suitable	Total		
77,131	152,728	199,942	264,590	246,265	940,565	76%	16%

Source: FAO website (www.fao.org)

Sweet Potatoes opportunities for production in Tanzania and the EAC region are observed when ranking for major agricultural crops for food commodities is prepared from the FAO data. As seen in the table below Tanzania's rank for sweet potatoes production is second (2nd) in the EAC region and 7th in the world. At the same time Uganda is second in the world rank and the first in the region. Other countries' ranks include; Rwanda (9th), Burundi (10th) and Kenya 13th in the world ranking structure.

Table 2: Worldwide Ranks of Major agriculture food commodities produced in EAC states (2007)

Product	Tanzania	Kenya	Uganda	Burundi	Rwanda
Maize	24	29	43	91	95
Rice(paddy)	35		56	71	91
Beans	11	8	7	15	19
Cassava	8	29	12	28	9
Millet	16	28	7	44	58
Banana	40	24	20	11	

Sugarcane	43	30	43	76	82
Oil seeds	14	8	12		
Sorghum	13		19	42	26
Sweet potatoes	7	13	2	10	9
Potatoes			58	111	36
wheat			97		90

Source: FAO website (www.fao.org)

This data indicates that the country and EAC region in general has a comparative advantage for sweet potatoes production. Despite the comparative advantages in production shown in the table below, still many challenges remain such as low production and consumption of sweet potatoes. Such challenges fall in various categories such as infrastructural and behavior and attitude factors with a perception that sweet potatoes is a female crop. As a result men are not much involved in production and consumption.

Intermittent food insecurity and VAD remains unmanaged public health threats in Tanzania, with dire health consequences to many people, affecting most disastrously, women and children. There is therefore a pressing need to explore innovative, sustainable, life quality changing and cost effective methods of accessing nutritious food to reach the most vulnerable segment of the population. Food based approaches are most profoundly effective approaches, more sustainable, with initial little cost, that still decline overtime. Integrating OFSP as a food based approach, and promoting consumption across the population has been demonstrated as a cost effective intervention in combating VAD and managing food insecurity to the general population including specific advantage to rural population in particular and low and medium income earners in urban settings. The understanding of the health benefits of OFSP, its acceptance as equally nutritious and enjoyable food, and increasing its demand and consumption will be strongly determined by a comprehensive strategy that promotes the value chain of OFSP, from varieties multiplication; commercial and household production; sufficient nutrition education across the public and appropriate behavioral change communication.

Some of the existing projects on OFSP in Tanzania are:

Name of project	Focus	Location	Time frame	Implementing institution	Donor
SASHA	Marando bora	Lake zone	2009-2014?	CIP	BMGF
S/potato Improvement	Breeding	Lake zone	2009-2012	NARS-Tanzania, Ukiliguru	AGRA
Promotion of OFSP	S/P value chain	Eastern and Central zone	2012-2014	NARS-Tanzania, Kibaha	URT-COSTECH

Some of the OFSP released varieties in Tanzania include the following:

Variety	Major Characteristics	Status
Simama	-High yielding (20t/ha), tolerant to SPVD, high dry matter content, most popular , Consumer accepted, highly marketable, cream flesh	Released 2000
Ukerewe	-High yield (15-20t/ha), high dry matter , sweet, tolerant to SPVD, marketable, cream with orange pigments in the background	Released 2003
Kiegea	OFSP, Moderate yield (12-15 t/ha), tolerant to SPVD, moderate dry matter content, accepted by farmers	Released 2010
Mataya	OFSP, Moderate yield (12-15 t/ha), tolerant to SPVD, moderate dry matter content, accepted by farmers	Released 2010

Varieties in National performance Trial (NPT) in the lake zone include:

Variety	Major Characteristics	Status
Kakamega	-High yielding (16.5t/ha), OFSP, tolerance to SPVD, high dry matter content (32%), maturity 4 months.	NPT
Ejumula	-Moderate yield (15t/ha), high dry matter content (33%), OFSP, sweet, mild tolerance to SPVD, maturity 4 months	NPT

Naspoti	OFSP, Moderate yield (16 t/ha), tolerant to SPVD, moderate dry matter content, accepted by farmers	NPT
Polista	High yield (12-15 t/ha), tolerant to SPVD, white flesh, moderate dry matter content, accepted by farmers	NPT

2. ADVOCACY AND COMMUNICATION STRATEGY

2.1 THE ESSENCE AND PURPOSE OF ADVOCACY FOR OFSP

The first purpose of this advocacy is to promote public health goals, in particular adoption of food based approach and specifically the OFSP to combat VAD in Tanzania. The advocacy is designed to focus on public policy and meant to strategically influence policy change and provide a framework for this particular public health discussion to engage the attention and influence the behavior of the policymakers whose decisions structure the environment in which people act; the primary intention being to address any policy, power and resources gap and to take advantage of the national development approach which emphasizes participation, policy development, and political processes.

The second purpose of this advocacy is to promote personal behavior change with a focus on the health behavior of individuals and address the prevalent information gap with the purpose of communicating nutritional benefits of OFSP; to promote commercial and subsistence production of OFSP, and increase demand and consumption of OFSP at community and household level. This is because communication is indispensable and a vital component in initiatives that seeks to provide knowledge as well as endeavors to change people's attitudes and norms (Sydner, 2007)

Following a recognition that OFSP is not popular sweet potatoes brand in Tanzania, and are not know to be especially nutritiously advantageous and effective in combating VAD, they no or little attention from farmers which affects the supply and demand for both quality planting materials and OFSP themselves. It has been established that food based intervention approaches that package food production and change in nutritional behavior and practices have are pole positioned to attain more sustainable nutritional objectives (Betty, 2010 op cit). Accordingly, the application of Behavior Change Communication (BCC), which is described as strategic use of communication and social marketing tools to promote positive health outcomes, becomes essential because the target to achieve a nutrition behavior change requires the strategy to provide individuals with the necessary resources, knowledge, skills, motivation and reinforcement needed to encourage positive change in health behavior (Sydner, 2007 op cit).

2.2 PURPOSE OF THE ADVOCACY AND COMMUNICATION STRATEGY

The advocacy strategy for OFSP and respective communication for behavior change, outlines interventions aimed at resource mobilization for the OFSP value chain, enhancing a conducing policy environment to facilitate and guide the OFSP value chain, and communication to increase consumption of OFSP, which involves identification of key messages, target audiences and advocacy and communication channels that will be used to promote OFSP to the respective stakeholders as well as among women, children and the general population. The primary purpose is to provide a framework for a comprehensive strategy that integrates the OFSP value chain in promoting the crop's production, multiplication and consumption. The sweet potato value chain, understood as including all the actors from input suppliers (appropriate varieties, vines) to farmers, traders and consumers (Thiele et al. 2009)

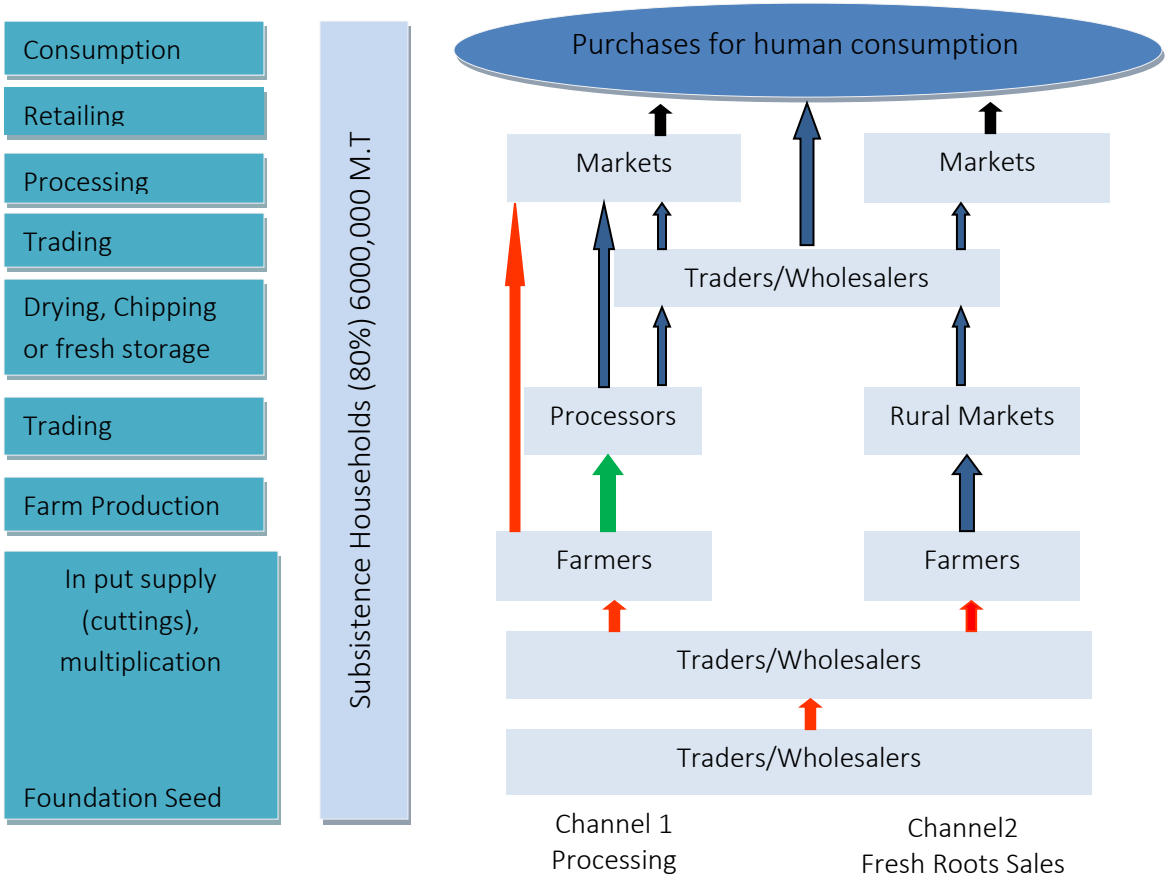


Fig: Sweet Potato value Chain (Thiele et al. 2009)

2.3 GOALS OF THE ADVOCACY AND COMMUNICATION STRATEGY

The primary goal of this strategy is to combat VAD among women and children in Tanzania, by facilitating, increasing and sustaining production and consumption of OFSP and thereby improve quality of life across this segment of society. The secondary goal is to improve and sustain food security across the population, by providing a reliable, nutritious and delicious food option on top of the available food options in the country.

2.4 OBJECTIVES OF THE ADVOCACY AND COMMUNICATION STRATEGY

i. To advocate for prioritization of OFSP and respective resource allocation in planning and implementation of central and local government development programmes
ii. To increase demand articulation for OFSP
iii. To mobilize resources for investment in enhancement of the OFSP value chain
iv. To advocate for review and introduction of national-level policies integrating Nutrition

2.5 PRIMARY TARGET AUDIENCE

The primary target audience for this advocacy and communication strategy involves women of reproductive age, women with children under five years old, pregnant women, and lactating mothers. This group entails a group most vulnerable to VAD, and it is also entails primary care givers and people most responsible for feeding children and preparing family meals.

2.6 SECONDARY TARGET AUDIENCE

i. PMO-RALG
ii. Ministry of Health and Social Welfare
iii. Ministry of Agriculture, Food and Cooperatives
iv. Ministry of Livestock and Fisheries
v. Development Partners
vi. Civil Society Organizations (INGOs, NGOs, CBOs, FBOs)
vii. Private Sector
viii. Communities and community Leaders, including religious leaders
ix. The general public (targeting fathers, grandfathers, grandmothers, uncles, aunts, brothers, sisters and friends)

2.7 LEAD INSTUTUTIONS

Government Ministries and Institutions

- Prime Minister's Office (PMO)
- Regional Administration and Local Government (RALG)
- Ministry of Health and Social Welfare (Tanzania Food and Nutrition Centre and Department of Preventive Services)
- Ministry of Agriculture Food Security and Cooperatives (MAFC)
- Ministry of Livestock and Fisheries

- Ministry of Community Development, Gender and Children (MCDGC)
- Ministry of Education and Vocational Training (MEVT)

Development Partners

- United Nations Children's Fund (UNICEF)
- The World Bank
- World Health Organization (WHO)
- World Food Programme (WFP)
- Irish Aid
- USAID

Non Governmental Organization

- Africare
- Save the Children
- Feed the Children
- Helen Keller International (HKI)
- Partnership for Nutrition in Tanzania (PANITA)
- Centre for Counseling, Nutrition and Health Care (COUNSENUTH)

Academic Research / Training Institutions

- Sokoine University of Agriculture

Private Sector

- Millers, Vegetable Oil Industry (CTI, Bakhresa Food Products, Power Foods)
- TASPA

2.8 STRATEGY DESIGN

This strategy was developed with input from a two days workshop that involved experts from the Prime Minister's Office (PMO), Ministry of Agriculture, Food and Cooperatives (MAFC), Ministry of Health and Social Welfare (MoHSW), NGOs, Media, practicians in health and nutrition and other stakeholders. The process began with a literature review of relevant data on health, nutrition in Tanzania, the literature review continued throughout the development of the strategy. The workshop and literature review gathered very valuable information regarding the nutrition status especially of women and children in Tanzania, and provided an insight in the attitudes, behaviors, barriers and motivating factors that may influence consumption of OFSP as well as the advocacy and communication strategies that will promote OFSP in the country.

3. THE ADVOCACY AND COMMUNICATION THEORETICAL FRAMEWORK

The essence of the theoretical framework in this advocacy and communication strategy is to provide a paradigm or paradigms that can best inform program planners of the relevant internal, external and dynamic interplay of issues which might have implications on their respective initiatives to influence policy change, to mobilize resources and to promote access and utilization of OFSP. The theories presented here, albeit concisely, are meant to explain, provide comprehension and shed light on the approaches, strategies that might lead to behavioral

change or to successful conclusion of an undertaking and why. Accordingly, the adoption of these particular theoretical orientations is strategic to provide grounds for selection of specific strategies to achieve program objectives. The frameworks, for instance provide guidance in recognizing the most appropriate target audiences, in identifying the most likely approaches, techniques and methods for stimulating the desired change; they also provide parameters for evaluating program or initiative outcomes.

The interventions proposed in this strategy are based on the Advocacy Coalition Framework, specific elements of Social Cognitive Theory (SCT) and the Transtheoretical Model of Change (TMC).

3.1 THE ADVOCACY COALITION FRAMEWORK (ACF)

The Advocacy Coalition Framework (ACF) contends that that policy change is not simply the result of competition among various interests in which financial resources and institutional rules are critical, but that 'policy-oriented learning' within and between coalitions is an important aspect of policy change (Weible, et al, 2009).

One of the key strengths of ACF is that it widens and focuses the attention of policy analysts toward subsystem-wide dynamics with multiple actors who are motivated by their beliefs, structure their relationships into advocacy coalitions, and try to influence policy through utilizing multiple resources and venues, as such it has two causal drivers: (a) the core values of coalition values and (b) external perturbations.

For ACF to be successful, two items are fundamental:

i. A coalition must be structured in a way that reflects its policy environment;
ii. For development of health promotion policy advocacy practices, good theories of the policy change process and of coalition building and structuring are essential.

Some of the ACF important elements identified to include that;

- It assumes that coalition seeks to alter the behavior of governmental institutions in order to achieve the policy objectives in their respective policy cores.
- It encourages stakeholders involvement, including agency officials, researchers, and journalists as potential members of advocacy coalitions
- It believes stakeholders' including agency officials, researchers, and journalists, have policy beliefs very similar to those of interest group leaders and their legislative allies
- It perceives stakeholders, including agency officials, researchers, and journalists as engaging in some nontrivial degree of coordinated activity in pursuit of their common policy objectives.

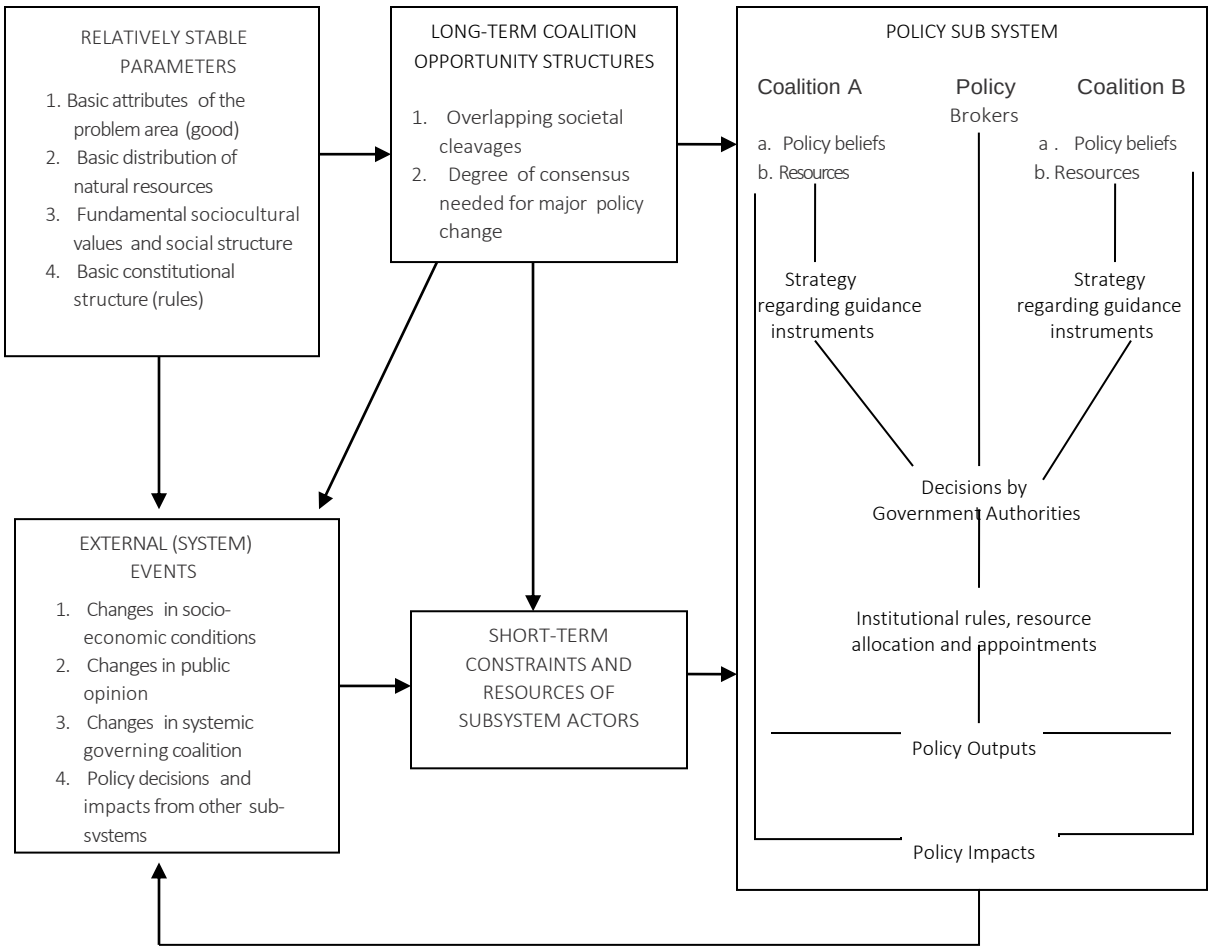


Figure: The Advocacy Coalition Framework Flow Chart – adopted from Weible et al 2009

ACF identifies two types of policy change and change is deemed major or minor based on the topic and the scope of policy change.

i. Major Change, which is change in the policy core aspects of a governmental orientation,
ii. Minor Change, which is change in the secondary aspects of a government orientation.

ACF approach is to use multiple Intergovernmental Venues and Coalition Strategies to influence the change it seeks to effect. In an intergovernmental system, coalitions have a multitude of possible venues, including legislatures, chief executives, administrative agencies, the courts, and all relevant levels of government and local government.

Accordingly, relevant coalition's guidance instruments include

i. Seeking to influence legislatures or respective authorities to alter the budgets;

ii. Trying to affect public opinion via the mass media and other effective mechanisms

iii. Attempting to alter target group behavior via context effective mechanisms and approaches.

3.2 BEHAVIOUR CHANGE MODEL

According to Glanz et al. (1990) initiatives to yield behavior is best done with an understanding of behavior change theories and ability to use those theories in practice, because, in the process of attempting to change behavior, environments or policies, practitioners must design, develop and deliver interventions.

3.2.1 Social Cognitive Theory (SCT)

The Social Cognitive Theory (SCT) advances that people's actions, are determined, significantly influenced and can be explained by consideration of the triadic interplay of factors namely behavior, personal and environmental factors. Environmental factors entail situational influences and the environment in which behavior is preformed while personal factors include instincts, drives, traits, and other individual motivational forces. "In this model of reciprocal causation, action, cognitive, affective, and other personal factors, and environmental events all operate as interacting determinants" (Bandura, 1989)

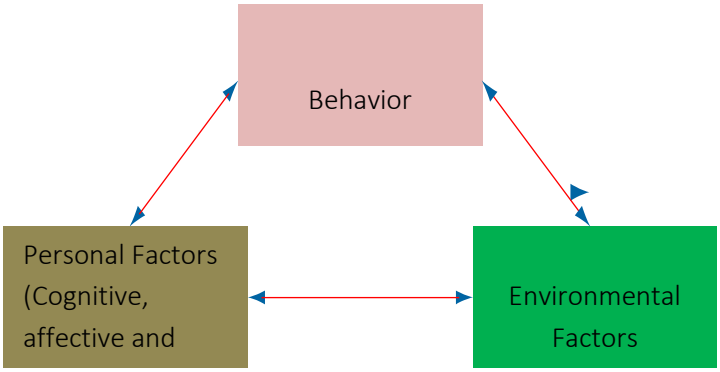


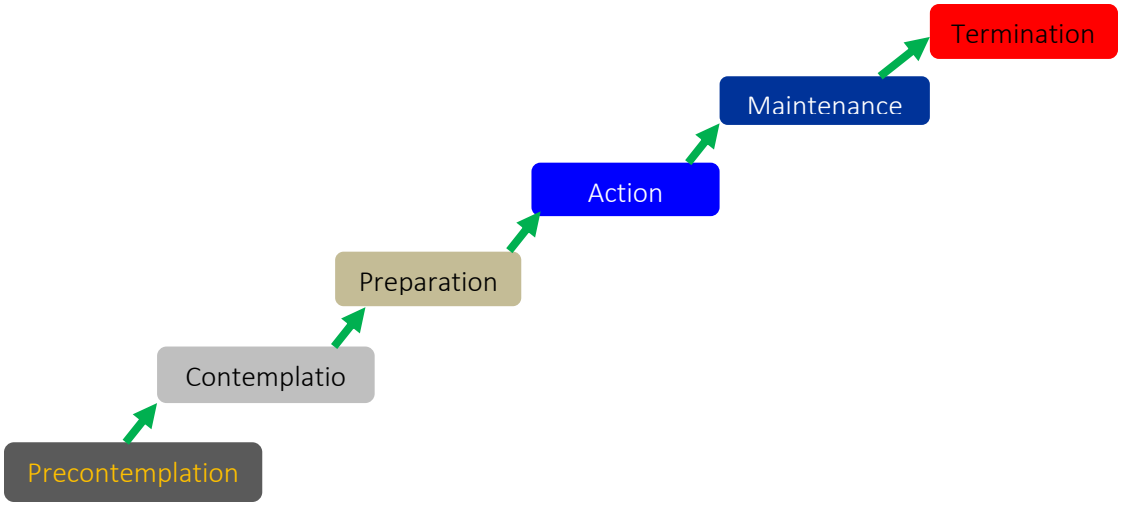
Figure: Social Cognitive Theory Model - Pajares (2002)

The basic assumption in SCT is that human beings learn behavior, by observing other's social interactions, experiences, and outside media influences (Spahn, 2010 et al.) SCT further advances that health behavior change in an individual is dependent on three key factors namely, self efficacy, goals and outcome expectancies (ibid.)

The application of SCT in this particular strategy is based particularly on its proposition that for individuals, behavior change is realized primarily through learning by observation. For promotion of OFSP as a nutrition strategy, the operational dimension of this observation, would therefore lead to intervention approaches that involves strong elements of demonstration to communicate the various OFSP messages, modeling and role playing, social support and enhancement of self-efficacy.

3.2.2 Transtheoretical Model of Change (TMC)

The Transtheoretical Model of Change conceives change as a process involving progress through a series of stages, namely precontemplation, contemplation, preparation, action, maintenance and termination (Prochaska & Velicer, 1997). The model is particularly useful for the advocacy and communication strategy because workshop discussions revealed that both the primary and secondary target population had very low awareness both the OFSP and its importance in addressing VAD. In which sense, most of the population was still in the precontemplation stage. For example Howard (1994) observed that malnutrition is perceived as evidence of violation of



the Chaggas cultural precepts regarding cosmological balance, particularly those which deal with marriage and reproduction. Traditionally it was considered a taboo to engage in sexual intercourse postpartum and breastfeeding was expected to last a minimum of 1 year and continue up to 3 years, while the moment the woman who is breast feeding is expected to immediately stop when she discovers she is pregnant. This belief is strongly embedded, such that shift people to an alternative explanation and solution might require patience and well guided intervention.

The operational implication of the TMC therefore requires the recognition of these stages to allow designing of effective and context sensitive interventions cognizant with the target group's stage. This is crucial for behavior change and has greater likelihood to be effective. The model can therefore guide interventions to raise awareness and provide information regarding OFSP and its nutritional value as key elements in creating demand of both vines and OFSP roots. A sense of the stage the target population is, will also guide the evolution of the intervention measures, and messages that are transmitted and as well as communication regarding desired change of consumption pattern and behavior and to prioritize the consumption of OFSP by especially the primary target group, including communicating of information regarding proper preparation, consumption patterns, preservations etc. For example, it has been observed that farmers in areas with marked dry seasons in Tanzania sun-dry sweetpotato to extend the period when it may be consumed. In some parts of Tanzania roots are sliced fresh or after boiling before drying and these products can be stored for six months and perhaps longer (RIU, 2007.). This being a long held practice, and with certain cultural, traditional, subsistence and other

implications, if it is established for instance that such a practice lowers the quality and nutritional value of the food, it will need very careful strategy to alter and influence alternative practices.

3.2.3 Attitude Change Theories

The workshop discussion highlighted that on top of having little or no knowledge of both the OFSP and its nutritious advantage, some segments of the Tanzanian society and some localities have a negative attitude towards orange fleshed potatoes. With some perceiving sweet potatoes as food for women and children; some perceiving it as a fall back option during hunger and therefore carrying the connotation of trouble of crisis food; further some had qualms about the varieties available lacking high dry matter content. Such attitudes and perceptions highlights consumer preferences and reflects that acceptance of OFSP might not be smooth in some parts of the country or in some segments of the society. Negative attitudes might also be influenced by financial implications of accessing OFSP. This is because it has been observed that in Tanzania, better nutrition is associated with higher income (Alderman et al. 2006), therefore low income earners who do not grown OFSP especially those in urban areas, might consider OFSP as an added cost. While nutrition interventions have a substantial beneficial effect, it will be necessary to convince such individuals to place value in the health and well being of their family, rather than in OFSP.

Awareness of the probable attitude stumbling block, necessitate OFSP interventions to consider application of some attitude change theories. For example, the Social Judgment Theory (SJT) which explains how people's prior attitudes may distort their perceptions of an advocated position in persuasive messages, and how such perceptions mediate persuasion. SJT posit that a person's own attitudes serve as a judgmental yardstick that influences where along a continuum a persuader's advocated position is perceived to incline (Sherif & Hovland, 1961). It is in that sense that, Zanna & Rempel (1988) proposes that when attempting to change attitudes it is important for persuaders to use multiple methods, including a) disseminating information, b) including messages that are high in affect or emotion, or c) messages that connect attitudes to past behaviors.

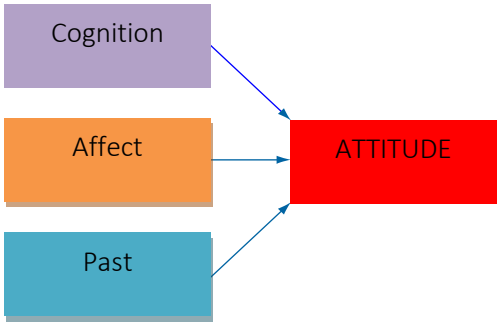


Figure: Zanna & Rempel's Conceptualization of Attitudes (1986)

Furthermore, of particular relevance to this strategy is the recommendation by Herek (1986) which is based on the insightful observation that human being's attitude tend to be built overtime and have a way of sustaining themselves. For introduction of change to attitude, is therefore critical to consider in program design, elements that focus on perception change, creatively constructing messages and scenarios that will foster

attitude change. One of the most effective means of achieving attitude change through message communication, it to use the priming technique which basically, align the thinking or advocated position with a related issues but one which the target audience have a more positive attitude to, and even hold dear, a technique known as 'priming.' For example, it will be necessary to communicate messages that align health, life, well being of women and children, with OFSP because of the natural care and concern people have over their families. In some instances, it might be necessary to link OFSP with income generation, especially because it has been established that a combination of income growth and nutrition interventions often works effectively in various levels of respective value chain (Haddad et al. 2003)

In the same inclination, it is also important to note that, attitude is a precursor to behavior, but change of attitude does not necessarily or immediately lead to change of behavior. Bearing that in mind, it will be critical for communication interventions to emphasize the benefits of adopting and utilizing OFSP a, i.e. the importance of changing the attitude and subsequent behavior, and creatively enlighten on portray of care and being responsible, social appropriateness and the positive effect of adopting and utilizing OFSP.

3.3 THE STRATEGY'S COMMUNICATION FRAMEWORK

The strategy's communication framework is adopted from UNICEF's Communication for Development[5] guideline, which posit that effective communication depends on the synergistic use of advocacy, social mobilization and behavior development communication.

i. Advocacy[6] is described as "the continuous and adaptive process of gathering, organizing and formulating information and data into argument, which is then communicated to policy-makers through various interpersonal and mass media communication channels." In the same inclination as UNICE, through advocacy, the project will seek to influence policy-makers, political, government, community, religious, social leaders and other relevant authorities, to create an enabling policy and legislative environment and allocate resources equitably.

ii. Social mobilization[7] is described as "a process that engages and motivates a wide range of partners and allies at national and local levels to raise awareness of and demand for a particular development objective through face-to-face dialogue. Members of institutions, community networks, civic and religious groups and others work in a coordinated way to reach specific groups of people for dialogue with planned messages. In other words,

[5] http://www.unicef.org/cbsc/index_42329.html last accessed 7th June 2012
[6] http://www.unicef.org/cbsc/index_42346.html last accessed 7th June 2012
[7] http://www.unicef.org/cbsc/index_42347.html last accessed 7th June 2012

social mobilization seeks to facilitate change through a range of players engaged in interrelated and complementary efforts."

iii. Behavior and Social change[8], entails utilizing strategies across the behavior and social change continuum, with the conviction that a combination of approaches must be utilized for meaningful change to be sustained.

"Behavior change is commonly defined as a research-based consultative process for addressing knowledge, attitudes and practices that are intrinsically linked to programme goals. Its vision includes providing participants with relevant information and motivation through well-defined strategies, using an audience-appropriate mix of interpersonal, group and mass-media channels and participatory methods. Behavior change strategies tend to focus on the individual as a locus of change."

"Social change, on the other hand, is understood as a process of transformation in the way society is organized, within institutions, and in the distribution of power within various social and political institutions. For behaviors to change on a large scale, certain harmful cultural practices, societal norms and structural inequalities have to be taken into consideration. Social change approaches, thus, tend to focus on the community as the unit of change."

[8] http://www.unicef.org/cbsc/index_42352.html last accessed 7th June 2012

4. CORE COMPONENTS OF THE STRATEGY

4.1 Overview

One of the main goals of this strategy is to facilitate, enhance and help create demand and increase consumption of OFSP dishes and sweet potato products to the general population but particularly among women of reproduction age, pregnant and lactating women, children and people with various forms of chronic diseases in Tanzania. As it has been noted, OFSP is not a widely known and popular variety of sweet potatoes in Tanzania. Accordingly, in order to achieve the desired project outcomes an approach that comprehensively captures the entire OFSP value chain spectrum is essential.

The OFSP initiative in Tanzania has two levels of engagement, one the overarching level and two the operational level.

The core components of the overarching level include:

i. Resource mobilization;
ii. Advocacy for further enhancement of policy and legislative environment,

The overarching level provides two complimentary actions points that are bedrock to the OFSP value chain entailing key operational components of the program which will include:

i. Quality vines production and dissemination
ii. OFSP production at household and community level as well as for commercial purposes
iii. OFSP specific nutrition education
iv. Demand creation and behavior change motivation.

The strategy centers on using the following approaches to realize its objectives:

i. Interpersonal communication and consultative engagements with respective stakeholders,
ii. Community-level behavior-change communication activities
iii. Community mobilization strategies and mass media

These approaches are designed to work symbiotically, and are therefore most effective if implemented synergistically and simultaneously. The primary focus of the approaches is to engage partners and stakeholders in working together to support and facilitate the OFSP initiative in Tanzania; creating awareness, mobilizing community action for increased production and consumption of OFSP dishes and products, providing nutrition education, addressing the socio-cultural barriers that may undermine OFSP demand, and enhancing skills and knowledge needed to promote consumption of OFSP across the general population and sustain

consumption of OFSP especially among women of reproductive age; lactating and pregnant women, and children.

4.2 Institutional stakeholders' engagement

Institutional stakeholders will be key for overarching level of the strategy.

4.2.1 Resource Mobilization Strategy

Agricultural policies and projects in Tanzania have traditionally focused only on increasing yields, productivity, and general food availability but not necessarily producing nutritional foods. National agricultural policies in developing countries including Tanzania have rarely focused on public health.

It is only recently that the problem of nutrition has drawn attention nation wise to the extent of inauguration the National Nutrition Strategy. RAC project on OFSP has come at the opportune time for its advocacy for change and fundraising for investment. Public awareness for the knowledge of OFSP health benefits has to be supported at high government level.

There is ample evidence that nutrition concerns have drawn global attention. Nationally it is portrayed by the commitment of the Prime Minister (inauguration of the National Nutrition Strategy 20th September 2011) and the President himself recently at the G8 meeting (May 2012). The US Government, World Bank and the EU all committed themselves to address the problem of nutrition.

It is obvious that behavior change in Tanzania could take ages to be adopted but since OFSP has excellent health qualities, this new drive on nutrition concern can capture the attention of leaders once it is launched at a very high profile. OFSP has a unique selling proposition "cost effective source of Vitamin A" of which if taken at bay would lead on to success.

In order to make an entry for OFSP to be effective in Tanzania, it has to be orchestrated as a health concern and the most cost effective source of vitamin A. Once it is a health concern and the promotion is organized in collaboration with the government, funds would be available for the RAC Project. OFSP is promising for a number of reasons. It contains very high levels of carotenoids, it is well accepted by the young children who are usually targeted, it is easy to cultivate, vegetatively propagated, and fairly drought-resistant once established. It is also a good source of energy for children and adults. Together these qualities make OFSP an excellent food security crop. It is also less labor intensive than most other staple crops, and this is particularly helpful to labor-constrained households such as those affected by HIV/AIDS. It can be planted over a broad range of time without considerable yield loss, and can fill some seasonal gaps in energy and vitamin A intakes.

To this effect, RAC has to conduct a needs assessment on the ground which will develop an OFSP investment document with key messages on nutrition tailored net mapping. The document preparation has to also involve lead areas such as:

1. The Prime Minister's Office (Coordination of Government Business)
2. The Ministry of Health and Social Welfare (TFNC & Nutrition)
3. Ministry of Agriculture, Food Security and Cooperatives (Research and Food Security)
4. District Councils: Community Development(communication channel, Health (Clinical officers at health centers and Education and Vocational Training(Involvement of Teachers and students as agents of change in nutrition education on health benefits of OFSP and dissemination)Village governments
5. TAHA (commercialization of OFSP to investors for the local and export market including value chain development)
6. Media (TV and Radio public awareness)

It should be noted that advocacy campaigns organized among multiple partner agencies can be extremely effective when the effort is well-coordinated and all partners can agree on a common set of goals, objectives, and strategies.
Before organizing the social event, RAC agents have to make informal courtesy calls to policy makers with a developed fact sheet on OFSP and healthy living to solicit their views and support. This includes the Speaker or Deputy Speaker of the Parliament, parliamentary committees of lead Ministries, Permanent Secretaries, DPs, NGOs CBOs, Religious Leaders, Private Sector etc, and also to generate public discussions with the media including press briefing.

RAC identifies a strong theme and uses the document to organize a social event for the official launch of OFSP advocacy and fundraising. Sponsors of the social event can be solicited from selected partners in the private sector (in exchange of The launch has to be officiated by a very high national dignitary (The President, Vice President or the Prime Minister).

THE AUDIENCE:

1. All government lead Ministries (very gender sensitive)
2. Parliamentarians committees of lead Ministries(Chairpersons)
3. Development Partners and NGOs - Local and International involved in nutrition related matters.
4. Agriculture Research Institutes
5. Private Sector /Local and Supermarkets /TAHA/ Exporters /Agro-processors / Agricultural Trading Companies / Farmers (of sweet potatoes and traders / SACCOS/ MVIWATA etc
6. Selected primary and secondary school students(end users), Universities - SUA(Agribusiness Department), CBE and UDSM (Entrepreneurship department)

RAC Project Funding

Resources for specific nutrition-related projects generally target investments that address nutrition per se. Sources of project funding include both multilateral and bilateral funds, as well as the private sector. Sources that are the most promising to fund the RAC project include the following:

1. The World Bank
2. USAID
3. UNICEF
4. DFID
5. IRISH AID
6. GIZ
7. JICA
8. EXPORT TRADING COMPANY
9. TAHA
10. NGOs , BELIEF ORGANIZATIONS
11. PENSION FUNDS
12. BANKS
13. Mining Companies
14. Petroleum Companies
15. Local Businesses----Shoprite Supermarket/Shoppers Plaza/ sea Cliff Village Supermarket/Traders (local businesses are often ready to help support fundraising in their area, especially if they can get a little publicity so that other locals know how they're supporting the community).

4.2.2 Policy Change

Two elements of advocacy for policy change have been identified:

i. Gender mainstreaming of the National Nutrition Policy and the National Nutrition Strategy and other nutrition related policies
ii. Reviving the initiative and pushing for the completion and adoption of the National Food Security Policy

4.3 Community Outreach/ Interpersonal Communication (IPC)

For implementers on the ground, it is recommended that strategic community outreach and interpersonal communication be most utilized, as it is likely to be the most effective way to reach the target groups as well as to engage grassroots stakeholders. These approaches will be most effective in raising awareness about VAD, dissemination of information and education regarding OFSP and its nutritional value, promote and encouraging consumption of OFSP, and in mobilize community support. These approaches involve physical interaction, direct communication and empirical demonstration, either face to face or in small groupings, in providing information and requisite health education, and supporting communities and individuals to adopt, access, grow, and consume OFSP.

Consistent with the main intention of influencing behavior change in consumption patterns of the primary target group, the techniques that are recommended as most appropriate and likely to yield most results should be interactive and motivation oriented, designed to impart skill and contextualized user friendly knowledge including appropriate infant and child feeding techniques (including how to prepare a healthy diet for children using easily accessible items and suitable meal preparation techniques, through cooking demonstrations and recipe trials. Facilitation of establishment of community health groups and networks can be an effective means of building rapport and establishing an implementation platform. Furthermore, establishing a modus operand with dispensaries, health centers, day care centers, nurseries and primary schools will provide an important gateway to the specific primary target group. It is noted that community health officers (CHOs) and community development officers (CDOs) are in pole position to take a lead and coordinate the community outreach and interpersonal communication approach.

4.4 Mass Media

Mass media includes television, radio, print media, visual media, etc. Mass media is in pole position to communicate key messages and reach a wider range of the population in the shortest possible frame of time. Mass media has great potential to help in raising awareness, promoting knowledge, extending reach, reinforcing IPC activities and creating a supportive social environment for behavior change. However, the messages need to be tailored in an evolutionary trend guided by the Transtheoretical Model of Change. For example as the awareness is still low, the initial use of mass media can be focused on print, visual, utility and traditional media (clear radio and TV messages, billboards, leaflets, t-shirts, drama, songs etc); as OFSP awareness and acceptance increases, messages can be released via radio spots, talk shows and interactive call in programs featuring key OFSP messages; when the primary target group has been saturated with OFSP message and demand in that group is high, the message can evolve to incorporate other segment of the society.

4.5 Community Mobilization

Community Mobilization can be used as a strategy that allows stimulation, motivation and engagement of stakeholders, of both primary and secondary target groups to entice them to in becoming active agents of promoting production, marketing and consumption of OFSP. Agents of Change need to conduct and contextualize a stakeholders analysis in respective localities and design mechanisms of how to strategically engage them collectively, independently or in several complimentary partnerships based on strategic location of the stakeholder and the role they can play. The most effective start offices would be the relevant central and/or local government office in the locality and engaging stakeholders in a spiral format, from the center outwards. Integrating these initiatives with stable structures and institutions is important to ensure sustainability and important buy in. These stakeholders can then assist in mobilizing action to raise awareness, providing education and influence policies, especially in the local context, and influence behaviors at the community and household levels.

4.6 Training and Capacity Building

Appropriate imparting of up to date and correct information is key for the success of the OFSP initiative. Experience shows however, that the more information descends the ladder of dissemination, the more distortion it acquires. This will necessitate agents of age to be adequately and regularly trained to provide consistent, up to date and correct information. Furthermore, they need to be trained to be trainers as well as effective communicators, to ensure that they empower other stakeholders to the same level of insightful they have, and that they all communicate a consistent message to target groups. Some of the central tenets to be trained on include a comprehensive overview of VAD, for instance prevalence, causes, risk factors, signs and symptoms, health consequences, preventive measures; guidelines on preparation and feeding techniques , a fact sheet on the nutritional value and importance of OFSP, and guidelines on adequate maternal and child feeding practices. This information need to be as context specific as possible, and therefore access and use of local information and records, for instance from health facilities will be fundamental.

5. ADVOCACY AND COMMUNICATION STRATEGY MATRIX

5.1 Stakeholders' Analysis

The targeted stakeholders for this strategy include: Government of Tanzania, Ministries, Local governments, private sector organizations, Faith based organizations, National and international CSOs and NGOs working in agriculture and nutrition; donors, national, provincial policy and decision makers, especially those in agriculture, health, education, and planning and finance departments in the centre and local governments. Other private sector companies, including multinational and national entities.

stakeholder	Roles	Ways for Strategic engagement
Public sector	• Policy formulation and review • Resources allocation for Nutrition issues	• Making presentations in the workshops and meetings • Paying a visits in their offices • Attending in their meetings and workshops and making contributions and introduction on RAC project, Nutrition, food

		security and OFSP interventions for VAD
Private sector	• Production for nutritional foods crops such as OFSP • Provision for inputs for production of OFSP	• Visiting private sector agents who are strategic investors for OFSP production of vines and agrochemicals • Making presentations in their meetings or Workshops on OFSP roles
Development Partners	• Allocate resources for Nutrition and OFSP promotion, • Advocating for policy change to included nutrition issues • Advocating for Prioritization for OFSP in the list of strategic crops	• Listing the DP who are interested and support in health and nutrition issues in Tanzania • Making appointments with DPs and introducing OFSP interventions by RAC project and requesting them to think of allocating funds for OFSP in their next budgets • Inviting DP in the RAC project • Making presentation on OFSP roles in Combating VAD
CSO and FBO	• Advocating for more resources allocation for OFSP as cost effective means for dealing with VAD • Sensitize villagers on the importance for OFSP for	• Listing CSO dealing with health and agriculture in Tanzania • Paying a visit CSO offices and introducing the RAC and OFSP roles

	food security and VA	• Inviting the CSO in RAC project meetings where presentation about OFSP role for combating VAD is done • Forging a link with strategic relation with some CSOs who can assit for advocating for policy change or scall up resources for OFSP promotion • Work with CSO working in health and agriculture to advocate for policy and more resources allocation for OFSP promotion
Research and Academic Institutions(R&A)	• Conduct various research related to OFSP • Advocating for more resources allocation for OFSP as cost effective means for dealing with VAD • Sensitize their members on the importance for OFSP for food security and VA	• Listing Research and academic(R&A) institutions specialised in health, nutrition and agriculture in Tanzania • Paying a visit R&A offices and introducing the RAC and OFSP roles • Inviting the R&A in RAC project meetings where presentation about OFSP role for combating VAD is done • Forging a link with strategic relation with some R&A who can assist in various researches related to FSP promotion

General Public	• Production and consumption of OFSP • Build capacity for RAC change agent to design and implement OFSP small project such as Vines production	• Use media to explain the food and nutrition securities challenges in Tanzania • Use media to introduce the role of OFSP to get rid of VAD • Formulate OFSP production groups in selected villages • Paying a visit in the villages and making presentations on the role of OFSP for Food and nutrition securities especially for fighting VAD
Media	• Select effective media for Promotion of OFSP and RAC project • Use of media to advocate for policy change and resources mobilization	• Sponsor some programs that will introduce the RAc project and role of OSFP in fighting VAD and advocate for more resources be allocated by MDAs, and LGA for OFSP • Forge strategic relation for promotion for nutrition issues and food securities

5.2 The advocacy and Communication Strategy Matrix

Aim 1: Increased investment/resource allocation for OFSP

Aim 2: Policy change to support OFSP scaling up

References

Academy for Educational Development (AED), Helen Keller International (HKI), & Tanzania Food and Nutrition Centre (TFNC) (n.d.) Assessing the Sustainability of the Tanzania National Vitamin A Supplementation Program: Results of a sustainability analysis, Dar es Salaam, Tanzania

Bandura, A. (1989) Human Agency in Social Cognitive Theory, *American Psychologist*, vol. 44, No. 9, pgs. 1175-1184

Betty, Burri, J. (2010) Evaluating Sweet Potato as an Intervention Food to Prevent vitamin A deficiency, *Comprehensive Reviews in Food Science and Food Safety*, vol. 10, no. 2 pgs 118-130.

Blackie, M. J. (1990) Maize, food self-sufficiency and policy in East and Southern Africa, *Food Policy*, vol. 15, Issue 5, pgs 383–394

Brown A. (2000) Current Issues in Sector-wide Approaches for Health Development: Tanzania Case Study. Geneva: World Health Organization, 2000.

Davenport, E.S., Litenas, C., Barbayiannis, P. & Williams, C. E. S. (2004) The effects of diet, breast-feeding and weaning on caries risk for pre-term and low birth weight children, *International Journal of Paediatric Dentistry*, vol 14, Issue 4, pgs 251–259

DeRose L. F., Das, M. & Millman, S. R. (2000) Does Female Disadvantage Mean Lower Access to Food? *Journal of Population and Development Review*, vol. 26, Issue 3, pgs 517–547, Villamor,

E., Msamanga, G., Urassa, W., Petraro, P., Spiegelman, D., Hunter, D. J. & Fawzi, W.W. (2006) Trends in obesity, underweight, and wasting among women attending prenatal clinics in urban Tanzania, 1995–20041,2,3, *American Journal of Clinical Nutrition, vol. 83 no. 6 1387-1394*

Ellison, Brian A (1998). The advocacy coalition framework and implementation of the Endangered Species Act: a case study in Western water politics. *Policy Studies Journal*, vol. 26, no 1, pgs 11-19

Fawzi WW, Mbise RL, Hertzmark E, Fataki MR, Herrera MG, Ndossi G, Spiegelman D. (1999) A randomized trial of vitamin A supplements in relation to mortality among human immunodeficiency virus-infected and uninfected children in Tanzania, *The Pediatric Infectious Disease Journal Newsletter*, Vol. 18, No.2, pgs.127–33.

Ferreira, L. M. (1996) Poverty and Inequality during Structural Adjustment in Rural Tanzania, *Policy Research Working Paper*, Issue 1641, The World Bank

Glanz, K., Lewis, F. M., & Rimers, B. K. (eds.). (1990). *Health Behavior and Health Education: Theory, Research, and Practice*. San Francisco, CA: Jossey-Bass.

Haddad, L., Alderman, H., Appleton, S., Song, L., Yohannes, Y. (2003) Reducing child malnutrition: how far does income growth take us? *World Bank Economic Review*, vol. 17, No. 1, pgs. 107–131.

Hagenimana,V., Low, J., Anyango, M., Kurz, K., Gichuki, S. T. & Kabira, J. (2001) Enhancing vitamin A intake in young children in western Kenya: Orange-fleshed sweet potatoes and women farmers can serve as key entry points, *Food and Nutrition Bulletin,* vol. 22, no. 4, *Special Issue on Long-Term Food-Based Approaches Toward Eliminating Vitamin A Deficiency in Africa, pgs 376-384*

Harold Alderman, Harold; Hoogeveen, Hans & Mariacristina Rossi (2006) Reducing child malnutrition in Tanzania: Combined effects of income growth and program interventions, *Journal of Economics & Human Biology*, vol 4, Issue 1, pgs 1–23

Herek, G. (1986), The Instrumentality of Attitudes: Toward a Neo-Functional Theory. *Journal of Social Issues,* vol. 42, no.2, pgs 99–114

Hivos Tanzania, Sikika & Policy Forum (2010) Malnutrition: Can Tanzania afford to ignore 43,000 dead children and Tshs 700 billion in lost income every year? *Policy Note No. 02*, accessed 04th June 2012 at http://uwazi.org/uploads/files/Fighting%20Malnutrition%20English%281%29.PDF

Howard, Mary (1994) Socio-economic causes and cultural explanations of childhood malnutrition among the Chagga of Tanzania, *Journal of Social Science & Medicine*, vol. 38, Issue 2, pgs 239–251

Jenkins-Smith, H.C., & Sabatier, P. (1994) Evaluating the advocacy coalition framework, *Journal of Public Policy*, vol.14 pgs 175-203

Kidala, D., Greiner T., & Gebre-Medhin, M (2000) Five-year follow-up of a food-based vitamin A intervention in Tanzania, *Journal of Public Health Nutrition*, vol. 3 No.4, pgs 425-431

Leach, V. & Kilama, B. (2009) *Institutional Analysis of Nutrition in Tanzania,* Special Paper 09.31, Dar es Salaam, REPOA

Low, Jan W., Arimond, M., Osman, N., Cunguara, B., Zano, F. & Tschirley, D. (2007) Food based Approach: Introducing orange-fleshed sweet potatoes increased serum retinol in young children in rural Mozambique. *The Journal of Nutrition*, vol. 137 no.5, pgs. 320-327

Mamdani, Masuma & Bangser, Maggie (2004) Poor people s experiences of health services in Tanzania: A literature review, Women s Dignity Project, accessed on 3rd June 2012 at http://www.womensdignity.org/Peoples_experience.pdf

Masanja, H., de Savigny, D., Smithson, P., Schellenberg, J., John, T., Mbuya, C., Upunda, G., Boerma, T., Victora, C., Smith T., & Mshinda, H. (2008). Child survival gains in Tanzania: Analysis of data from demographic and health surveys. *Lancet, 371*: 1276–83.

Massawe, S.N., Urassa, E.N., Nyström, L. & Lindmark, G.(2002) Anaemia in women of reproductive age in Dar-es-Salaam, Tanzania, *East African Medical Journal*, vol.79, no. 9, pgs 461-6.

Mazengo, M. C., Simell, O., Lukmanji, Z., Shirima, R. & Karvetti, R-L. (1997) Food consumption in rural and urban Tanzania, *Acta Tropica*, vol. 68, Issue 3, pgs 313–326

National Bureau of Statistics & ICF Macro (2011) *Tanzania Demographic and Health Survey* 2010, United Republic of Tanzania

National Bureau of Statistics & Macro International (2005) *Tanzania Demographic and Health Survey 2004/5,* National Bureau of Statistics and Macro International: Dar es Salaam, Tanzania.

National Bureau of Statistics & Macro International (2010) *Tanzania Demographic and Health Survey 2010,* National Bureau of Statistics and Macro International: Dar es Salaam, Tanzania.

National Bureau of Statistics (2010) Trends in Food Insecurity in Mainland Tanzania Dar es Salaam, United Republic of Tanzania

Pajares F. (2002). *Overview of social cognitive theory and of self-efficacy*, accessed 1st June 2012, from http://www.emory.edu/EDUCATION/mfp/eff.htm

Prochaska, J. O. & Velicer, W. F. (1997) The Transtheoretical Model of Health Behavior Change, *American Journal of Health Promotion*, vol. 12 no. 1, pgs 38-48

RIU (2007) Sweet potato boosts health and income, accessed at http://www.researchintouse.com/nrk/Topic5/Sweet%20potato%20boosts%20health%20and%20incomes%20(CPH40).htm

Ruel, M. T., Minot, N. & Smith, L. (2005) Patterns and Determinants of Fruit and Vegetable Consumption in sub-Saharan Africa-A multi-country comparison, WB430, World Health Organization

Sabatier, P. A. & Weible, C. M. (2007) The Advocacy Coalition Framework: Innovations and Clarifications, *Theories of the Policy Process*, pgs189-222

Spahn, J. S., Reeves, R. S., Keim, K.S., Laquatra, I., Kellogg, M., Jortberg, B. & Clark, N. A. (2010) State of the Evidence Regarding Behavior Change Theories and Strategies in Nutrition Counseling to Facilitate Health and Food Behavior Change, *Journal of American Dietetic Association*, vol. 111, no. 6, pgs. 879-891

Sydner, L. (2007) Health Communication Campaigns and Impact on Behavior, *Journal of Nutrition Education and Behavior*, vol. 39 no. 2, pgs 32-40

Thiele, G., Lynam, J., Lemaga, B. & Low, J. (2009) Challenge Theme Paper 4: Sweetpotato Value chains, in 'Unleashing Potential of Sweet potato in Sub-Saharan Africa, CIP- Social Sciences Working Paper, pgs 106-129

UNDP (2000) *Tanzania Human Development Report: The State of Progress in Human Resource Development 1999*, Dar es Salaam, Tanzania

UNDP (2011) Human Development Report 2011: Sustainability and Equity: A Better Future for All, United Nations Development Program

UNICEF (2010) *Progress for Children: Achieving the MDGs with Equity*, No. 9, United Nations Children's Fund

United Republic of Tanzania (2011) Tanzania Country Report on the Millennium Development Goals 2010, Dar es Salaam, Tanzania

Urassa, D. P. Carlstedt, A., Nystrom, L., Massawe, S. N. & Lindmark, G. (2002) Quality Assessment of the Antenatal Program for Anaemia in Rural Tanzania, *International Journal for Quality in Health Care*, vol. 14, no. 6 pgs 441-448

URT (1992) The National Health and Nutrition Policy, Ministry of Health, Dar es Salaam, Tanzania

URT-NNS(2011) National Nutrition Strategy, Ministry of Health and Social Welfare, Dar es Salaam, Tanzania

Weible, C. M., Sabatier, P. A. & McQueen, K. (2009) Themes and Variations: Taking Stock of the Advocacy Coalition Framework, *The Policy Studies Journal*, Vol. 37, No. 1, pgs. 121-140

Zanna, M. P. & Rempel, J. K. (1988) Attitudes: A new look at an old concept, in Bartal & A. W. Kruglanski (eds.), *The social psychology of knowledge*, pgs 315–334. Cambridge, UK: Cambridge University Press.