



Nutritional Improvement  
for children in urban  
Chile and Kenya

## **BRIEFING PAPER 6**

**NICK**  
(Nutritional Improvement for children in  
urban Chile and Kenya)

### **Establishing and supporting the Mombasa Urban Nutrition Working Group**

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#### **Section one: summary**

Disparities in opportunities between rural and urban areas in many countries, as well as other historical factors, have led to the rapid growth of informal settlements and slum communities in urban areas in which residents experience social and economic disadvantages. There is a strong and well-established link between social and economic disadvantage and child malnutrition, the consequences of which can be long-term and irreversible, reducing educational achievement and negatively impacting human capital development. Mothers and children from resource poor settings are especially at risk of poor health and other forms of deprivation, and interventions that tackle single determinants of poor maternal and child health have little chance of long-term impact.

In view of the foregoing, the Nutritional Improvement for children in urban Chile and Kenya (NICK) study was implemented in one of Mombasa's informal settlements through supporting intersectoral action research to tackle the social determinants of child malnutrition. Mombasa was chosen as it had been relatively un-researched and little was known about the dynamics of child under-nutrition. The NICK project was informed by findings of the World Health Organization (WHO) commission on social determinants, as well as other considerations that included

policy, supportive environments, local capacity and the need to review how different stakeholders view health conditions.

In Mombasa, the researchers on the NICK study supported the formation of a municipal level intersectoral Urban Nutrition Working Group (UNWG) to implement action plans developed on the basis of evidence and existing theories and experiences. Three self-help community-based groups were supported to implement activities aimed at tackling the determinants of child under-nutrition. The study showed that it is possible to bring together members from different professions, ministries and community groups to work together to not only think about the causes behind the causes of health and disease, but to design, implement and monitor seemingly unrelated interventions aimed at tackling a specific concern. The experience showed that the success of working groups is however dependent upon the availability of conducive policy and supportive environments, space for individual and group growth and achievements and community ownership - all situated at the appropriate level in national and local governance systems such as counties and municipalities.

This paper is divided into six sections: section one provides the summary, the second section gives a background and rationale to the formation of the urban nutrition working group, while section three highlights the key actions/activities conducted by the UNWG. The fourth section summarises the process of monitoring activities at different levels. Section five presents the key achievements while the sixth and the last section distils the key lessons from co-ordinated, multi-sectoral actions.

#### **Section two: Background and rationale**

There has been a rapid increase in the urban population in developing countries as a result of many factors including overall population pressure, but mainly due to skewed development priorities where socio-economic development has been centralised, making cities the centres of politico-socio-economic activity. The resultant disparities in opportunities

between rural and urban areas, as well as other historical factors have led to the rapid growth of informal settlements and slum communities in which residents experience social and economic disadvantages. Until recently, Kenya did not officially recognise the existence of informal settlements, thus these settlements were not included in urban planning and development.

Child under-nutrition is recognised as a serious public health problem in many developing countries and a major cause of child morbidity and mortality. Recent findings by Save the Children (2012) indicate that as many as one in four children worldwide are stunted (too short for their age). The problem is especially serious in Kenya where the 2008/9 Kenya Demographic and Health Survey (KDHS) data show that more than one in three (35 percent) of children under 5 years were stunted (low height for age) with 14 percent being severely stunted, while 7 percent were wasted (low weight for height) with 2 percent being severely wasted (KNBS and Macro 2010). These figures raise a serious concern because the consequences of child malnutrition, especially during the first two years of life, are both long-term and irreversible, reducing educational achievement and negatively impacting human capital development (Grantham-McGregor, Cheung et al. 2007; Victora, Adair et al. 2008; Fernando C. Barros, Cesar G. Victora et al. 2010).

There are many social determinants of poor child health and malnutrition (Grantham-McGregor, Cheung et al. 2007). These include a broad range of social, economic and environmental factors operating at multiple levels of social organizations. They include education, income, working conditions, housing, neighbourhood and community conditions, and social inclusion (WHO 2008). Interventions to tackle these determinants must of necessity involve multiple sectors including but not limited to health, gender, water, food security and education at local levels. In 2011 the WHO member states signed the Rio Declaration, which endorsed the social determinants approach to health and

health equity (WHO 2011). The NICK<sup>1</sup> Project has adopted this approach, and elements from the Knowledge Network on Urban Settings of the WHO Commission on Social Determinants of Health - KNUS (WHO 2008), in seeking to help the city of Mombasa in Kenya to change the social determinants of health by supporting action research to broaden participation and strengthening accountability for child nutrition.

The NICK Project, funded by a grant from the Economic and Social Research Council (ESRC) and the British Government Department for International Development (DfID), aimed at improving child malnutrition in Mombasa's informal settlements through changing the social determinants by establishing intersectoral action research groups<sup>2</sup> at municipal level, facilitating three cycles of action and reflection, and evaluating the impact on child malnutrition using an experimental design.

### **The approach**

In 2010 the Division of Nutrition in the Kenyan Ministry of Public Health and Sanitation (MOPHS) and the development partners formed a National Nutrition Technical Forum (NNTF) to coordinate all nutrition activities in Kenya. One of its activities has been to promote the establishment of urban nutrition working groups in major cities and the first of these groups was formed in Nairobi in 2010. The groups typically deal with nutrition and food security issues at provincial level. In April 2011, two groups were formed in the Coastal region of Kenya - Provincial and Municipal level groups - with support from the NICK project, through working with a wide range of stakeholders from the national to municipal level. The Municipal level group (formally referred to as the Urban Nutrition Working Group - UNWG) has membership drawn from the Ministries of Health;

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<sup>1</sup>Nutritional Improvement for Children in urban Chile and Kenya (NICK).

<sup>2</sup>In Kenya, the establishment of this action research group coincided with a directive by the Government of Kenya for such groups to be formed in all major cities and be referred to as Urban Nutrition Working Groups.

Gender, Children and Social Development; Education; Office of the President; Agriculture; Water; and Local Development. It also has membership of civil society and semi-autonomous government agencies (SAGAs).

The NICK researchers have facilitated this UNWG through three 6-monthly cycles of reflection, planning and action to stimulate new ways of thinking about child malnutrition and develop action plans for collaborative working. The group used the data generated by the NICK researchers through the literature reviews on the social determinants of poor child health and nutrition, situational analyses and baseline survey to inform its intersectoral action planning. Resulting from the above, three community based groups (one of which comprises of young and mostly single mothers) were been identified and empowered in order to contribute towards reduced inequalities and vulnerabilities. In addition, the UNWG is supporting the three groups in using existing mechanisms to address individual, household and group dynamics

### **Section three: Key actions**

*(i) Building the capacities of the three community groups:* The three groups identified were taken through a series of orientations and training aimed at tackling the determinants of poor child health and nutrition. It was essential to get community buy-in and therefore a series of public meetings were held where the project objectives were outlined and explained. During these consultations 17 groups were identified for support, however, due to resource limitations, only three groups could be supported through NICK. Reasons for working with only three groups were explained to the communities; that these three groups were selected on the basis of regular group meetings, record keeping, focus and a direct link of their activities to child health. Two of the three groups comprised community health workers that were already engaged in community activities, while the third was composed of young - and mostly single mothers. These community groups were then trained in activities aimed at reducing vulnerabilities and inequalities, some of which had a

direct link with poor child health and nutrition outcomes.

*(ii) Training in and implementation of balcony farming:* Poverty, being one of the key drivers of poor health, is common in slum communities therefore accessing food itself, let alone fresh food, is a challenge for most of the residents. Lack of proper and adequate nutrition is one of the determinants of poor child health. Slum communities are typically densely populated hence they have no space for conventional agriculture. In order to ensure that some type of fresh food is available at least to members of the community, a decision was reached to build the capacity of these groups, and by extension the community, in producing vegetables safely using the available spaces. The selected groups were trained in all aspects of balcony farming, and provided with seeds as a start-up to improving food security. These groups were then asked to encourage the community to develop their own balcony farms. Additionally, a demonstration plot was developed at a local health facility, where other community members would then be able to see the balcony farms. The young mothers group managed this demonstration plot with support from an agricultural officer, who is a member of UNWG. Proceeds from selling surplus vegetables were saved into the young mothers' group bank account.

*(iii) Training in the production and use of energy saving devices:* One contributor to poor child and family health is the use of smoky cooking devices, in poorly ventilated and closed spaces. Smoky cooking stoves are typically more expensive to maintain compared to the energy saving stoves. In a bid to ensure that children live in a cleaner environment, while at the same time giving the community groups an opportunity for income generation, training was conducted in the production and use of energy saving cooking devices. Each of these groups was then provided with 15 energy saving cooking stoves, that they would sell, generate income and use the investment and profit to continue selling affordable cooking devices to the community, while at the same time advising on their usage. The groups as well as individuals have taken this up and

the use of these devices is increasing in the study population

*(iv) Other training on income generation:* The UNWG organized trainings for the three community group members in August, 2012. The groups were trained in separation of plastic waste for sale and separation of waste at source to ensure that different types of waste could be further processed soon after leaving the household. They were also trained on the preparation of the waste into manure for use in their farms and for sale. This training was among the most-well received, perhaps because its immediate benefits. The three groups were also trained in bead making using locally available recyclable materials (such as old newspapers and calendars) as an additional strategy for waste management and income generation.

*(v) Psychosocial support training:* A three-day training was organized where the young mothers were provided with psychosocial support training. The UNWG realized that the young mothers had serious personal and group issues that required intervention for them to be able to effectively interact with one another within the group as well as develop their skills in self and group management. They were linked to health facilities that could provide more specialized support depending on need. The young mothers now actively seek support from UNWG members whenever they feel there are issues that require immediate external intervention. In informal discussions with the group members, the research team has learnt that the young mothers feel that this intervention has increased their self-esteem.

*(vi) Training on domestic violence prevention and mitigation:* Domestic violence against women is highly prevalent in Kenya. The national Demographic and Health Survey (DHS) data of 2008/9 indicates that one third (31.8%) of women aged between 15-49 years in Coast Province had experienced violence in the 12 months preceding the survey (KNBS & Macro, 2010). Interventions aimed at reducing urban violence have often focused on policies, retributive justice, and force. However, it is recognised that the urban communities

are themselves an integral part of understanding the causes and impacts of urban violence and for generating sustainable violence prevention initiatives (WorldBank 2010). It is for the above reasons that the three community groups were oriented on domestic violence, its impact on child health and nutrition as well as the possible strategies for prevention and mitigation. It was also felt that this training would be particularly useful for the groups since a large proportion of their members are community health workers and are in the best position to tackle domestic violence - one of the social determinants of poor child health and nutrition. This training was facilitated by a member of the UNWG.

#### **Section four: Documenting change through monitoring activities**

Monitoring of the project activities is done at two levels: the community and the UNWG. At the community level monitoring is done by the membership of the UNWG who have each been tasked with the responsibility for a specific action point in the developed action plans. For example, food security is the responsibility of the Agricultural Officer; domestic violence is monitored by the member from the ministry of Gender, Children and Social Development; nutrition by nutrition officers of the MOPHS; the community overall security by the area chief; water and sanitation by the water representative; and so forth. At the UNWG level monitoring is the responsibility of the group as well as the NICK researchers. The UNWG held monthly progress meetings to review the implementation process as well as plan for any remedial intervention between the six monthly cycles of review, reflection and action.

As earlier stated, the UNWG holds formal six monthly cycles of meetings to: (i) review progress and critically reflect on challenges it encounters; (ii) agree on new ways of working together and identify new opportunities for improving the subsequent cycle of action and reflection; and (iii) re-plan and refine the action plan for the next six months. It is during these cycles of meetings that the UNWG reflects on individual and group growth, on changes in mindset amongst the

membership and their line managers about determinants of the conditions they regularly encounter, and on the benefits/otherwise of intersectoral collaboration to tackle these determinants. Workshop reports are then generated and shared among the participating organizations.

## Section five: Key achievements

*Formation of a functioning working group:* The UNWG has been in existence since April 2011 and it is still functional (sometimes intersectoral working groups do not survive for long after formation). Its achievements were presented as an example of intersectoral collaboration in Coast Province Kenya during the launch of the National Scaling up Nutrition Conference in Kenya in November 2012 in Nairobi.<sup>3</sup> There has also been an evident change in the mindset of the UNWG members about the determinants of poor child health and the strategies to tackle the same. The initial action plans were based on tried and tested 'business as usual' model focusing on changing individual behaviour through giving information and developing skills. However, subsequent plans have had more co-ordinated, intersectoral actions based on shared understanding of the complex causation of child under-nutrition and reflection on why previous efforts have not worked. The group is currently

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<sup>3</sup>Scaling Up Nutrition, or SUN, is a unique Movement founded on the principle that all people have a right to food and good nutrition. It unites people—from governments, civil society, the United Nations, donors, businesses and researchers—in a collective effort to improve nutrition. SUN enables countries to take a collaborative approach – bringing together the people and resources needed to rapidly scale up nutrition-specific interventions as well as implement cross-sector strategies that are nutrition-sensitive. Nations, organizations and individuals working to scale up nutrition recognize that malnutrition has multiple causes. That is why it requires people to work together across issues and sectors to put nutrition into all development efforts. (Source:

[http://scalingupnutrition.org/about#countries\\_reveal](http://scalingupnutrition.org/about#countries_reveal))

. Kenya formally launched the SUN initiative in November 2012, at the Safari Park Hotel.

considering sustainability measures to ensure that the members stay connected.

*Contribution to informing policy:* Two UNWG group members participated in the formulation and completion of the draft National Nutrition Action Plan/Policy in September 2012. In the drafting of the policy evidence from the NICK was included in the justification for the need for: such a policy; and formation of county level working groups. Additionally, the UNWG will be transformed into a Mombasa Urban Nutrition Group, since its activities will formally be handed over to the government/ministry of health in September 2013, thus increasing the potential for sustainability and making Mombasa the first County to have a formal government-linked nutrition working group.

*Capacities of communities to tackle determinants of child health:* The community, through the three groups has made improvements in the manner with which they handle themselves and the groups. They now have fresh vegetables available to them, generate income from the production and the sale of vegetables and other items they produce. These items were show-cased during the Mombasa Agricultural trade fair in August 2012.

*An improved environment:* In comparison to other areas of the informal settlements where the UNWG is active, there has been an improved level of sanitation and waste disposal. The community groups and leaders, and the UNWG members who cover the settlement in their regular discharge of duties have made this observation to the research team during the review meetings.

## Section six: Key lessons learnt on intersectoral collaboration: what works? What does not work?

*National and local level policies:* Intersectoral collaboration, as envisaged during inception of the project, anticipated that the policy environment would be favorable or at least amenable to change. In the case of Kenya, the government had already recognized the importance of intersectoral actions in improving citizens' well being, as evidenced by health

policies, nutritional policies, food security policies and the national nutrition action plans. At the national level, the Ministries of Health have formed intersectoral coordination committees to guide actions in specific divisions including health promotion and non-communicable diseases (NCDs).

*Situating the working group at municipal level:* The decision by the NICK project to support a working group at municipal level was informed by the conviction that the group membership at this level would comprise those that would be best positioned to understand, develop and implement locally appropriate action plans, produce an evidence base to influence policy upstream and downstream, and at the same time not be hindered by excess bureaucratic decision making procedures involved when actions have to be sanctioned at regional or national levels. The working group has therefore been able to reflect on, and implement, plans aimed at tackling the determinants of poor child health based on local conditions and to provide feedback to line managers on progress.

*Creating supportive environments:* The NICK project has been supportive of the UNWG even as it now prepares to transform and transition into a county level working group. Given that implementing interventions through intersectoral collaboration is relatively new to Kenya, it was important to ensure that the group received the necessary technical support to begin to think differently about the determinants of child nutrition and how to tackle the social determinants. The group also needed facilitation to decide and implement mutually agreed action plans, negotiate with line managers on the need for ensuring that group membership remained relatively stable, to reflect on their individual and collective actions and personal growth, to manage competing demands and expectations as well as to ensure that an evidence base was always used to support decisions. It was therefore crucial to provide the facilitation and support needed for such groups without imposition.

*Strengthening community action:* As previously mentioned, three community groups were identified, trained and

supported to enable them to participate in implementing the action plans developed by the nutrition working group. The leadership of these three groups has been participating in the circles of review, reflection and action planning and have participated in the thinking behind the decisions made at the working group level. The community members, through the three groups, have started to see the benefits of the interventions in their lives, and some have even taken the initiative to take further actions to improve their lives and the nutritional status of their children. Some of the actions proposed and being implemented to tackle domestic violence have emerged from the community itself. A project that proposes to work intersectorally should always ensure that the community not only participates but to the extent possible, is in charge of the planned actions.

*Developing personal skills and growth:* The NICK project has witnessed the development of personal skills and growth within both the nutrition working group and from the self-help community groups. There has been transition from convincing the working group and the three community groups on the link between seemingly unrelated determinants of poor child nutrition to actively seeking new ways of furthering this process. The trainings provided to the groups for example in energy saving, waste management and psychosocial support have also benefited working group members as evidenced by their reported growth. Linkages to help tackle poor child nutrition have been created, relationships at household level have been impacted and new possibilities have opened. Some of the growth witnessed was unexpected - since the NICK project only aimed at supporting intersectoral collaboration and action. It is therefore important that issues related to skill development and personal growth be factored in when planning on supporting long term intersectoral actions.

## References

- Abramsky, T., C. Watts, et al. (2011). "What factors are associated with recent intimate partner violence? findings from the WHO multi-country study on women's health and domestic violence." BMC Public Health **11**(1): 109.
- Agarwal, S., A. Srivastava, et al. (2010). Urban Health in Developing Countries Perspectives of Knowledge Management in Urban Health, Springer New York. **1**: 61-94.
- Ammaniti, M., A. M. Ambruzzi, et al. (2004). "Malnutrition and Dysfunctional Mother-Child Feeding Interactions: Clinical Assessment and Research Implications." Journal of the American College of Nutrition **23**(3): 259-271.
- Fernando C. Barros, Cesar G. Victora, et al., Eds. (2010). Health and nutrition of children: equity and social determinants. Equity, social determinants and public health programmes. Geneva, WHO.
- GOK. (2013). "opendata.go.ke." Retrieved 10th May 2013, 2013.
- Grantham-McGregor, S., Y. B. Cheung, et al. (2007). "Developmental potential in the first 5 years for children in developing countries." The Lancet **369**(9555): 60-70.
- Jejeebhoy, S. J. (1998). "Associations between wife-beating and fetal and infant death: impressions from a survey in rural India." Stud Fam Plann **29**: 300 - 308.
- KNBS and I. Macro (2010). Kenya Demographic and Health Survey 2008-09. KNBS and I. Macro. Calverton, Maryland, KNBS and ICF Macro.
- Koenig, M. A., R. Stephenson, et al. (2006). "Individual and contextual determinants of domestic violence in North India." American Journal of Public Health **96**(1): 1 - 7.
- Montgomery, M. (2009). "Urban poverty and health in developing countries." population bulletin **64**(2).
- SavetheChildren (2012) "A life free from hunger.: Tackling child malnutrition. London The Save the children Fund. ." **Volume**, DOI:
- Sverdlik, A. (2011). "Ill-health and poverty: a literature review on health in informal settlements." Environment and Urbanization **23**(1): 123-155.
- The NICK Project (2011). Preliminary Baseline Anthropometric Results - Kenya.
- Victora, C. G., L. Adair, et al. (2008). "Maternal and child undernutrition: consequences for adult health and human capital." The Lancet **371**(9609): 340-357.
- WHO (2008). Closing the gap in a generation: Health equity through action on the social determinants of health. Geneva, WHO.
- WHO (2008). Our cities,ourhealth,our future: Report to the WHO Commission on Social Determinants of Health from the Knowledge Network on Urban Settings Acting on social determinants for health equity in urban settings. Geneva, WHO.
- WorldBank (2010). Violent City: Understanding and Supporting Community Responses to Urban Violence. Washington, DC, World Bank.