1. Introduction
This article is a description of a process taken by the Government of Nepal (GoN) and its partners to formulate the Multisector Nutrition Plan (MSNP) II, costed at USD470 Million, covering the period from 2018 to 2022. The government of Nepal used the Results Based Strategic Planning (RBSP) process – a core component of the Results Based Management (RBM). The purpose of this article is to narrate the RBSP process so that other countries that are members of the SUN Movement can adapt it and replicate as needed. The secondary aim of this article is to demonstrate that formulating a multisector nutrition strategy can be done with limited outsourcing, following the blueprint of the RBSP and following participatory methods.

Nepal has a long-standing record and history of formulating Nutrition policies. Before describing the process of MSNP II 2018-2022 formulation we provide a brief historical journey of nutrition policy formulation in Nepal from 1978 leading up to the MSNP II 2018-2022 as shown in figure 1 below. Starting from 1978 the first National Nutrition Strategy was developed; this was followed in 1986 by the Second Nutrition Strategy also known as the Pokhara Declaration I and II. These earlier policies were very single sector driven.

Fig 1: Historical journey of Nutrition Policies leading up to MSNP II 2018-2022

- National Nutrition Seminar 1978
- National Nutrition Strategies 1996
- Nutrition Policy 2004 updated in 2008
- National Plan of Action for Nutrition 2007
- Nutrition Assessment and Gap Analysis (NAGA) 2011
- Joined SUN Global Movement, May 2011
- High Level Govt Commitment for MSNP, Sep 2012
- Multi-sector Nutrition Plan 2013-2017
- Multi-sector Nutrition Plan (2) 2018-2022

In 1989-1992, the first attempt at multi-sectoral nutrition programming was made through the Joint Nutrition Support Program (JNSP). The JNSP lacked engagement of sectors during its inception and thus could not become effective. In 2004, the National Nutrition Policy was developed by the health sector. In 2011 the Nutrition Assessment and Gap Analysis (NAGA)
was endorsed by the National Planning Commission (NPC). The NAGA identified strengths, weaknesses and gaps in nutrition programming. Primary determinants of undernutrition identified in the NAGA included inadequate food availability, access and affordability; poor food and care related behaviors; inadequate food quality/ nutrient density; and high prevalence of infection, which reduces food absorption and utilization. These identified determinants of malnutrition reflected the need for a multi-sector approach and thus resulted in the formulation of the first Multi Sector Nutrition Plan (MSNP) 2013 – 2017.

In the next sections we describe the steps taken formulate the MSNP II 2018-2022. The key steps followed the RBSP and focused on three key broad steps as follows; i) understand the situation, ii) choose what we are going to do, and iii) develop Plan of Action. A Roadmap was developed to guide the strategy formulation process.

2. Implementation of the Roadmap and key steps
Using the key components of the RBSP process a road map was developed as illustrated in the figure 2 below to guide the process of formulating MSNP II 2018-2022. The key components of RBSP indicated below are; i) deprivation analysis, ii) causality analysis, iii) theory of change formulation, iv) development of results framework and costing. The roadmap or vision map helps to break the process into sizeable chunks to avoid overwhelm and risk of getting tangled into details.

Fig 2: Roadmap for implementation of MSNP II 2018-2022
2.1 Deprivation Analysis
The focus of deprivation analysis was to first focus on; i) the status of malnutrition in Nepal against the Global targets of WHA and SDG as shown in table 1 below, ii) assess the average annual rate of reduction of stunting, iii) assess distribution of all WHA indicators from equity perspective to identify the vulnerable groups. A workshop was held to further discuss the deprivation analysis and to reach consensus.

2.1.1 Nutrition status and setting of World Health Assembly (WHA) and Sustainable Development Goals (SDG)
An exercise was carried out to align the MSNP II 2018-2022 with internationally agreed development goals namely the: six global targets for maternal and child nutrition endorsed by the 65th World Health Assembly (WHA) and the global nutrition targets for Sustainable Development goal number 2. The table 1 below shows the targets that were set for both WHA to be achieved by 2025 and SDG targets by 2030.

Table 1: Nepal’s status against global nutrition targets

<table>
<thead>
<tr>
<th>Global nutrition targets for 2025 and 2030</th>
<th>Base year situation</th>
<th>Progress</th>
<th>Nepal’s WHA target</th>
<th>Nepal’s SDG targets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>2016</td>
<td>2025</td>
<td>2030</td>
</tr>
<tr>
<td>1 Achieve 40% reduction in the number of children under-5 who are stunted</td>
<td>40.5%</td>
<td>35.8%</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>2a Achieve a 50% reduction of anaemia in women of reproductive age</td>
<td>35%</td>
<td>40.8%</td>
<td>18%</td>
<td>10%</td>
</tr>
<tr>
<td>2b Achieve a 50% reduction of anaemia in children</td>
<td>46.2%</td>
<td>52.7%</td>
<td>23.1%</td>
<td>10%</td>
</tr>
<tr>
<td>3 Achieve a 30% reduction in low birth weight</td>
<td>12.1%</td>
<td>24.2%</td>
<td>8%</td>
<td>–</td>
</tr>
<tr>
<td>4 Ensure no increase in childhood overweight</td>
<td>1.4%</td>
<td>1.2%</td>
<td>≤1.4%</td>
<td>–</td>
</tr>
<tr>
<td>5 Increase rate of exclusive breastfeeding in first 6 months to at least 50%</td>
<td>69.6%</td>
<td>66.1%</td>
<td>&gt;50%</td>
<td>–</td>
</tr>
<tr>
<td>6 Reduce and maintain childhood wasting to less than 5%</td>
<td>10.9%</td>
<td>9.7%</td>
<td>5%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Source: Ministry of Health (MoH), New ERA and ICF (2017) and Central Bureau of Statistics (CBS) 2015, Nepal

2.1.2 Average Annual rate of reduction of stunting
After setting targets against the nutrition goals for WHA and SDG an exercise was done to assess the whether the average annual rate of reduction of stunting was sufficient to achieve these global goals. Focus was placed on stunting as a key indicator. It was noted that stunting in children under the age of 5 years declined steadily over last 17 years; it was 57 per cent in 2001, 49 percent in 2006, 41 percent in 2011, 37 percent in 2014 and 36 percent in 2016/17 based on Nepal Demographic Health Survey (NDHS) 2016. The current Average Annual Rate of Reduction (AARR) of 3.1 per cent was noted to be not sufficient to achieve both WHA and SDG targets. The exercise indicated that there was need to accelerate actions through MSNP II 2018-2022 and increase the AARA of stunting to 4.3 per as shown in figure 3 below.
2.1.3 Stunting and inequities in Nepal

In addition to calculating the AARR of stunting an exercise was carried out to measure inequities in stunting in Nepal as shown in the figure 4 below. It was noted that there are still a marked disparity in stunting by gender, wealth quintile, and level of maternal education, geographical areas and caste/ethnicity. For example the children who are from the poorest wealth quintile are three times more likely to be stunted (49.2%) than the children from the richest quintile (16.5%). The children from the mothers who are not educated are twice likely to be stunted (45.7%) than the children from the educated mothers i.e. SEE (School Education Examination), previously SLC (School Leaving Certificate) (22.7%). The children of age-group below 18 years are less stunted and below the national average as compared to the children above 18 months of age. Children from the mountains are 45% and 27% more likely to be stunted (46.8%) than the children from the hills (32.3%) and terai (36.7%). As per the federal structures, Province 2, 5, 6 and 7 have prevalence of stunting above the national average, and Province 1 and 3 and 4 have less prevalence compared to national average. Particularly, the stunting prevalence is the highest in State 6 (54.5%) which is almost double than the prevalence in Province 4 (28.9%) which is the lowest among the provinces. The disparities and inequities on Nutrition need to be addressed by MSNP II 2018-2022.
2.2 Causality Analysis

After completing the deprivation analysis another workshop was carried out to explore causality of malnutrition in Nepal. The causality analysis was carried out guided by the UNICEF conceptual framework on causes of malnutrition as shown in figure 5 below. The equity analysis helped to group the country into zones based on levels of stunting in order to further understand the immediate, underlying and basic causes. The findings from the exercise further underscored the need to address nutrition from a multisectoral approach.
2.3 Theory of Change Workshop
The development of the theory of change was guided by the proceedings steps on deprivation analysis, causality analysis and the choice of Nutrition specific, Nutrition sensitive and need to create an enabling environment. The MSNP II 2018-2022 theory of change explains how activities are understood to produce a series of results that contribute to achieving the final intended impact on nutrition. The figure 6 below shows the theory of change as it appears in the MSNP II 2018-2022.
**Figure 6: Theory of Change: Improved Maternal, Adolescent and Child Nutrition**

**Desired Impact**
Improve maternal, adolescent and child nutrition, so that malnutrition no longer impedes the enhancement of human capital and overall socio-economic development of Nepal.

**Impact Indicators:** WHA Global Nutrition Targets 2025
- Stunting
- Anemia
- Low Birth Weight
- Childhood Overweight
- Breastfeeding
- Wasting

**Outcomes**
1. (Nutrition-specific) Improved access to and equitable use of nutrition-specific services
2. (Nutrition-sensitive) Improved access to and equitable use of nutrition-sensitive services and improved healthy habits and practices
3. (Enabling environment) Improved policies, plans, and multisectoral coordination at federal, provincial and local government levels to enhance the nutrition status of all population groups

**Governance**
- National Planning Commission
  1. Incorporate nutrition in sectoral policy and plans, with focus on gender equality and social inclusion
  2. Increase budget for integrated nutrition plan to address the gender, regional and social inequalities
  3. Strengthen information management system
  4. Ensure accountability by strengthening MNCH system

- Ministry of Federal Affairs and General Administration
  1. Ensure the inclusion of MSNP II in local, provincial and federal government’s plans
  2. Strengthen MSNP governance mechanism at federal, provincial, and local levels
  3. Policy framework developed for explicit budget articulation and implementation on nutrition at local, provincial and federal levels
  4. Appoint and provide leadership training to local nutrition champions to coordinate local level implementation

**Approach**

**Interventions**

<table>
<thead>
<tr>
<th>Health</th>
<th>Education</th>
<th>Women, Children and Social Welfare</th>
<th>Water Supply and Sanitation</th>
<th>Agricultural and Livestock Development</th>
<th>Livestock Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce MCV and adolescent micronutrient status to reduce anemia and other deficiencies 2. Improve IYCF feeding practices and the dietary diversity of WRA 3. Enhance preparedness for nutrition in emergency 4. Increase coverage of disease prevention and management 5. Appropriately treat and manage severely malnourished and sick children 6. Improve coverage and quality of health and nutrition services, including family planning and reproductive health services</td>
<td>1. Improve Early Childhood Development (ECD) for all children 36-59 months 2. Ensure the completion of secondary education for all girls 3. Improve life skills and nutritional status for all school adolescent girls</td>
<td>1. Ensure the economic and social empowerment of women 2. Strengthen child protection and development 3. Strengthen social protection services 4. Eliminate child marriage and other harmful traditional practices 5. Improve the availability of and access to maternal mental health services</td>
<td>1. Increase access to safe drinking water 2. Increase access to improved sanitation 3. Improve hygiene behavior practices and their management</td>
<td>1. Improve the availability of, physical and economic access to, and consumption of diversified food groups, especially indigenous local food (cereals, legumes, oilseeds and nuts) and fruits and vegetables 2. Improve the availability of, physical and economic access to, and consumption of diversified food groups, especially fresh meat, dairy, and eggs</td>
<td>1. Improve the availability of, physical and economic access to, and consumption of diversified food groups, especially fresh meat, dairy, and eggs</td>
</tr>
</tbody>
</table>
2.4 Results Framework

A final workshop was held to develop the results framework for MSNP II building on deprivation analysis, causality analysis, and theory of change. A vision and goal were crafted followed by formulation of major outcomes and impact as shown in sections below. The vision of MSNP II 2018-2022 is to embark the country towards significantly reducing malnutrition so that it no longer becomes an impending factor towards enhancement of human capital and for overall socio-economic development and the goal is to improve maternal, adolescents and child nutrition. These will be achieved by taking to scale both essential nutrition specific and sensitive interventions as well as nutrition enabling environment. The major outcomes are to (i) improved equitable utilization of nutrition specific services; (ii) improved healthy practices that promote nutrition sensitive services; (iii) policies, plans and multi-sectoral coordination improved at federal, provincial and local government levels targeting the results given in Table 2 below.

Table 2: MSNP II 2018-2022: Impact Results Framework

<table>
<thead>
<tr>
<th>Results-chain</th>
<th>Results Indicators</th>
<th>Baseline 2016</th>
<th>Target 2018</th>
<th>Target 2019</th>
<th>Target 2020</th>
<th>Target 2021</th>
<th>Target 2022</th>
<th>Means of Verification</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved maternal, adolescents and child nutrition</td>
<td>Prevalence of stunting among under 5 years children reduced</td>
<td>36 (DH5 2016)</td>
<td>34</td>
<td>31</td>
<td>31</td>
<td>29</td>
<td>28</td>
<td>NDHS, NMICS</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>Prevalence of wasting among under 5 years children reduced</td>
<td>10 (DH5 2016)</td>
<td>9.5</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>NDHS, NMICS</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>Prevalence of low birth weight reduced</td>
<td>24 (MICS 2014)</td>
<td>20</td>
<td>17</td>
<td>13</td>
<td>11</td>
<td>10</td>
<td>NDHS, NMICS</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>% reduction in children under five with overweight and obesity</td>
<td>2.1 (DH5 2016)</td>
<td>2</td>
<td>1.9</td>
<td>1.7</td>
<td>1.6</td>
<td>1.4</td>
<td>NDHS, NMICS</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>% reduction in WRA overweight and obesity</td>
<td>22 (DH5 2016)</td>
<td>22</td>
<td>21</td>
<td>20</td>
<td>19</td>
<td>18</td>
<td>NDHS, NMICS</td>
<td>Health</td>
</tr>
<tr>
<td></td>
<td>% of women with chronic energy deficiency (measured as BMI) reduced</td>
<td>17 (DH5 2016)</td>
<td>12</td>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td>Source: (NDHS, 2015) [MICS, 2014]</td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Health (MoH), New ERA and ICF (2017) and Central Bureau of Statistics (CBS) 2015, Nepal

2.5 MSNP II 2018-2022 Coordination structure in Federal Context

As a complement to the Results Based Strategic Planning process the government created a guideline on coordination of MSNP-II activities within the 3 tiers of government namely; i) Central ii) Provincial and iii) Local level. Steering committees in the three tiers of government provide coordination and technical advice and to make decision on MSNP II related planning and implementation. These committees coordinate vertically and horizontally with the line sector ministries and development partners for effective coordination of MSNP II related functions as shown in figure below.
2.5 Estimated Cost of MSNP II 2018-2022

The final exercise in the formulation of the MSNP II 2018-2022 was the activity-based costing of proposed actions by each of the sectors. The estimated cost of implementing MSNP II is US Dollar 470.20 million for the five-year period, with the Government of Nepal providing 59 percent and Development partners providing 41 percent of total funding. The activity costs were calculated based on past experience, market-based price, international prices and government norms and regulations. The estimated costs for MSNP II are compatible with the Nepal’s fourteenth three-year development plan 2016-2019, SDG 2030, Least Developed Country (LDC) Graduation 2022, sector-wise strategic plan and donor-driven initiatives that are implemented by the line ministries. The total cost is divided across the eight sectors and by nutrition specific and sensitive interventions as shown in table 3 below.

Table 3: Estimated Cost of MSNP II 2018-2022 in US$ Million

<table>
<thead>
<tr>
<th>Sectors</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
<th>Total</th>
<th>In Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Planning commission</td>
<td>0.53</td>
<td>0.73</td>
<td>0.72</td>
<td>0.76</td>
<td>0.74</td>
<td>3.48</td>
<td>0.74</td>
</tr>
<tr>
<td>Health</td>
<td>21.38</td>
<td>23.11</td>
<td>25.14</td>
<td>24.01</td>
<td>23.69</td>
<td>117.33</td>
<td>24.95</td>
</tr>
<tr>
<td>Agriculture</td>
<td>15.88</td>
<td>16.62</td>
<td>17.42</td>
<td>18.27</td>
<td>19.29</td>
<td>87.48</td>
<td>18.60</td>
</tr>
<tr>
<td>Livestock</td>
<td>0.97</td>
<td>0.84</td>
<td>1.04</td>
<td>0.92</td>
<td>1.13</td>
<td>4.90</td>
<td>1.04</td>
</tr>
<tr>
<td>Water Supply &amp; Sanitation</td>
<td>5.46</td>
<td>9.82</td>
<td>17.93</td>
<td>20.68</td>
<td>23.38</td>
<td>77.27</td>
<td>16.43</td>
</tr>
<tr>
<td>Women Children and Social Welfare</td>
<td>1.81</td>
<td>1.88</td>
<td>2.03</td>
<td>2.14</td>
<td>2.26</td>
<td>10.13</td>
<td>2.15</td>
</tr>
<tr>
<td>Education</td>
<td>32.96</td>
<td>33.02</td>
<td>33.12</td>
<td>33.22</td>
<td>33.34</td>
<td>165.65</td>
<td>35.23</td>
</tr>
<tr>
<td>Federal Affairs and Local Dev</td>
<td>0.40</td>
<td>0.75</td>
<td>0.88</td>
<td>0.93</td>
<td>1.0</td>
<td>3.96</td>
<td>0.84</td>
</tr>
<tr>
<td>Total</td>
<td>79.39</td>
<td>86.76</td>
<td>98.28</td>
<td>100.94</td>
<td>104.83</td>
<td>470.20</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: National Planning Commission, GoN

Note: USD = NPR 104 (when it was launched on 14 Dec 2017)
2.6 Endorsement process of MSNP II 2018-2022
The draft MSNP II 2018-2022 went through a series of government endorsements by the following committees; i) National Nutrition and Food Security Coordination Committee (NNFSCC), ii) High Level Nutrition and Food Security Steering Committee (HLNFSSC), and iii) National Planning Commission Board. The formal approval was by the Cabinet of ministers of the Government of Nepal followed by the launch of MSNP II on 14 December 2017.

2.7 Conclusion
The Multisector Nutrition Plan II 2018-2022 is not a replica of previous policies but identified a new thrust building on the lessons learnt from MSNP 2013-2017 such as;
   a) Evidence Informed: through Understanding of Deprivation, Causality and Theory of Change
   b) Results Based with realistic targets and doable Monitoring and Evaluation
   c) Understanding of interventions coverage and trends
      i. Attention and Scale up for low coverage interventions
      ii. Reverse Negative Trends and Strengthen poor performing interventions
   d) Gender Empowerment and Social Inclusion by reducing disparity and promoting equity
   e) Emphasis on new target groups: Adolescents, Women – pregnant and lactating through life cycle approach
   f) Emphasis on Emerging Challenges: Overweight and Obesity
   g) Missing Elements in MSNP 2013-2017: identified from desk review, Lancet 2013 recommendations such as; Emergency Nutrition, Maternal and Adolescent Nutrition, Mental Health, Early Childhood Development (ECD).
   h) Stronger Digital presents through the Food and Nutrition Portal and Social Media guided by robust strategy

*Prof. Dr. Geeta Bhakta Joshi* is *SUN Movement Nutrition Champion 2017*, Former Member, National Planning Commission, Government of Nepal. *Stanley Chitekwe* is Chief of Nutrition, UNICEF, Nepal. They led for the formulation/ detailing of MSNP II 2018-2022 and were instrumental for getting the plan formally approved from the Government of Nepal.