

A New Approach to Nutrition in Karnataka

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A new perspective on Nutrition

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Executive Summary

Malnutrition refers to deficiencies, excesses, or imbalances in a person's intake of energy and/or nutrients. WHO categorisation:

1. Undernutrition: *Includes wasting (low weight-for-height), stunting (low height-for-age) and underweight (low weight-for-age).*

2. Micronutrient-related malnutrition: *Includes micronutrient deficiencies (a lack of important vitamins and minerals) or micronutrient excess.*

3. Overweight, obesity and diet-related noncommunicable diseases: *such as heart disease, stroke, diabetes and some cancers.*

Malnutrition, traditionally tied to undernutrition, has been an enduring challenge for India.

However, We are now facing double burden of Malnutrition with Undernutrition pre existing and Overnutrition related malnutrition adding significantly to it. [1]

Our present approach to malnutrition majorly uses public nutrition approach. In this approach, interventions are targeted at the population level.

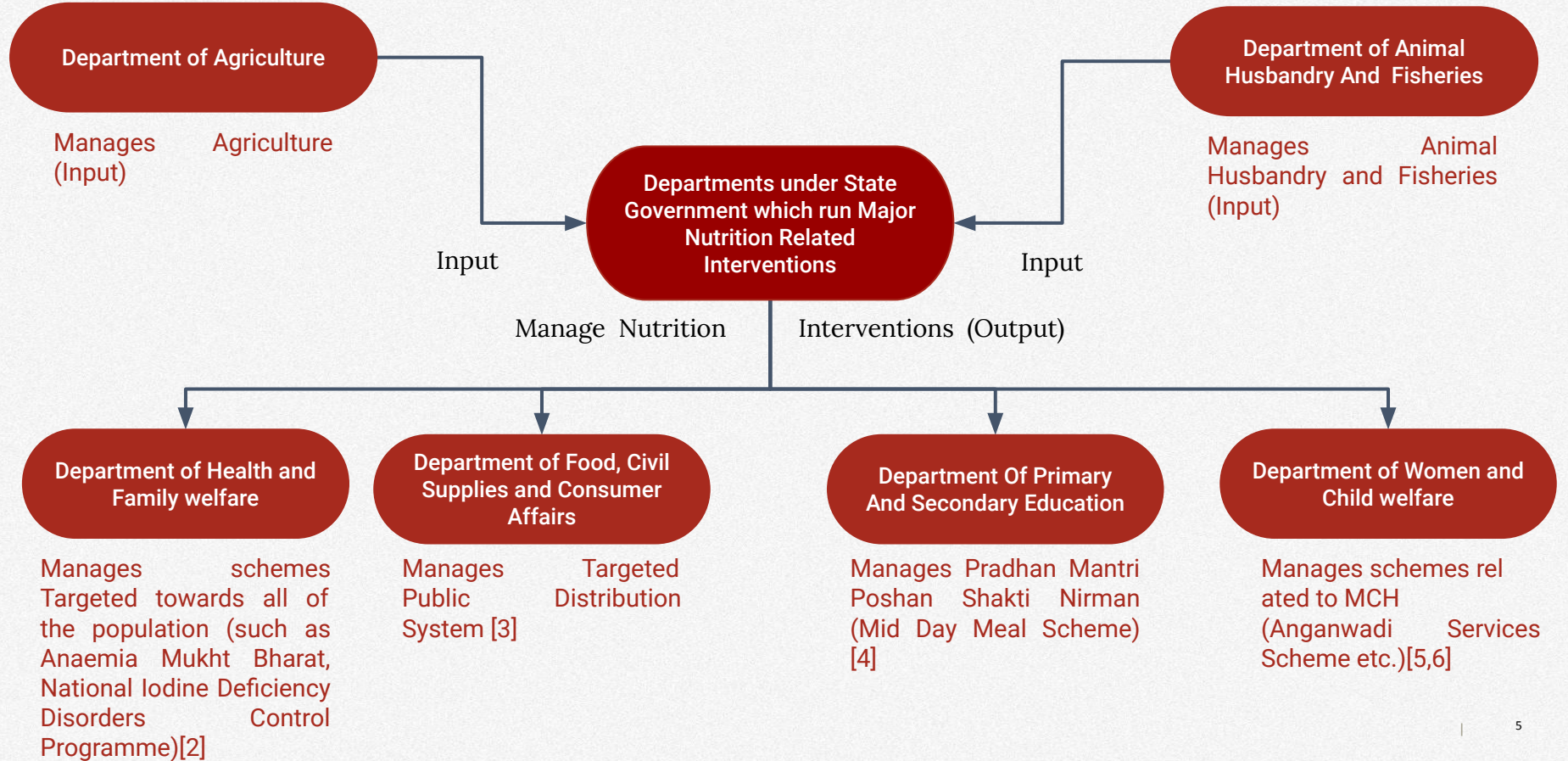
We recommend the separation of clinical and public nutrition approaches to better tackle malnutrition.

We advise an overhaul of the present structure of departments. The new configuration will consist of a Department of Nutrition, made up a Directorate of Clinical Nutrition, Directorate of Public Nutrition and a Directorate of Education and Training. A Karnataka Nutrition Institute will provide technical knowledge. All of the government's nutrition intervention will be overseen by the Nutrition Council of Karnataka. The council will be responsible for policy development and execution. This is a better approach due to its focus on public nutrition and a unified department of nutrition.

The Present Scenario

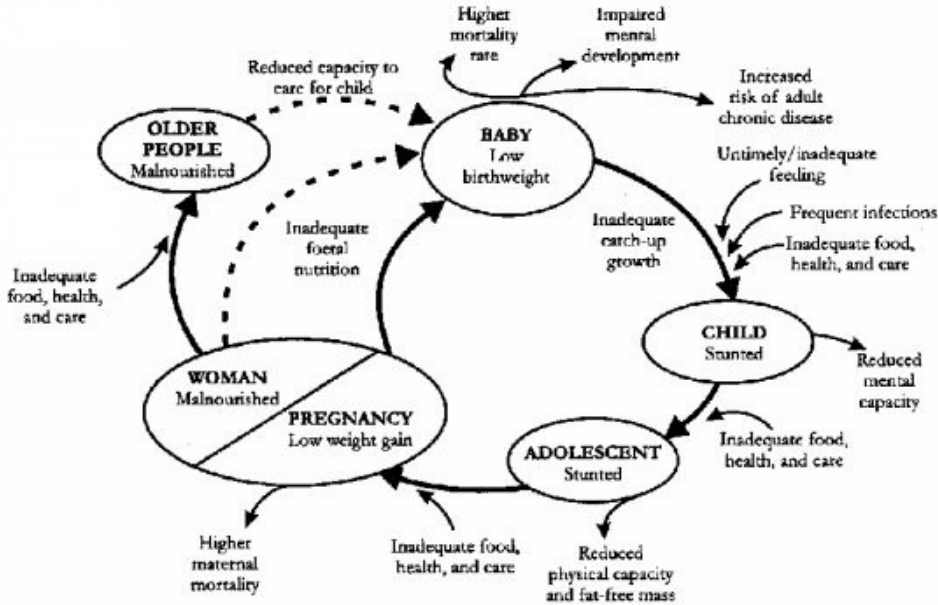


The Present Scenario





The Need for Change



Currently different departments run Government 's nutrition interventions. These range from the Department of Health and Family welfare to the Department Of Primary And Secondary Education.

Due to involvement of multiple departments of the government, coordination and cooperation becomes difficult. The Union Government's POSHAN abhiyan is an attempt to solve this.[6]

Instead of this current approach where we segregate our population by age group, there is a need to take a life cycle approach. This approach suggests that outcome in earlier part of life will have an affect on the next phase of your life. [7]

For instance, suffering from malnutrition in childhood has deleterious effects in adulthood in the form of probability of lower cognition and adverse health outcomes.

The [life cycle](#) approach to Undernutrition (Adapted from 4th Report – The World Nutrition Situation: Nutrition throughout the Life Cycle by United Nations Sub Committee on Nutrition)[7]

Due to these two major reasons, there is need for overhaul and consolidation of government's nutrition interventions into a single department.



CLINICAL VS PUBLIC NUTRITION

Two pronged approach:

Clinical Nutrition: Individualised and Personalised level

Public Nutrition: Community and Population level

There is a need to use a two pronged approach to tackle malnutrition.

Public Nutrition: Nutrition is improved at the community level. This includes intervention that is targeted at the population level.

This approach is preventive in nature and can be taken by the government to tackle malnutrition. This works best when issues that exist uniformly across the intended area/population are caused by a well-defined dietary deficiencies. This approach includes educating people about dietary changes and helping them achieve optimum levels of nutrition.

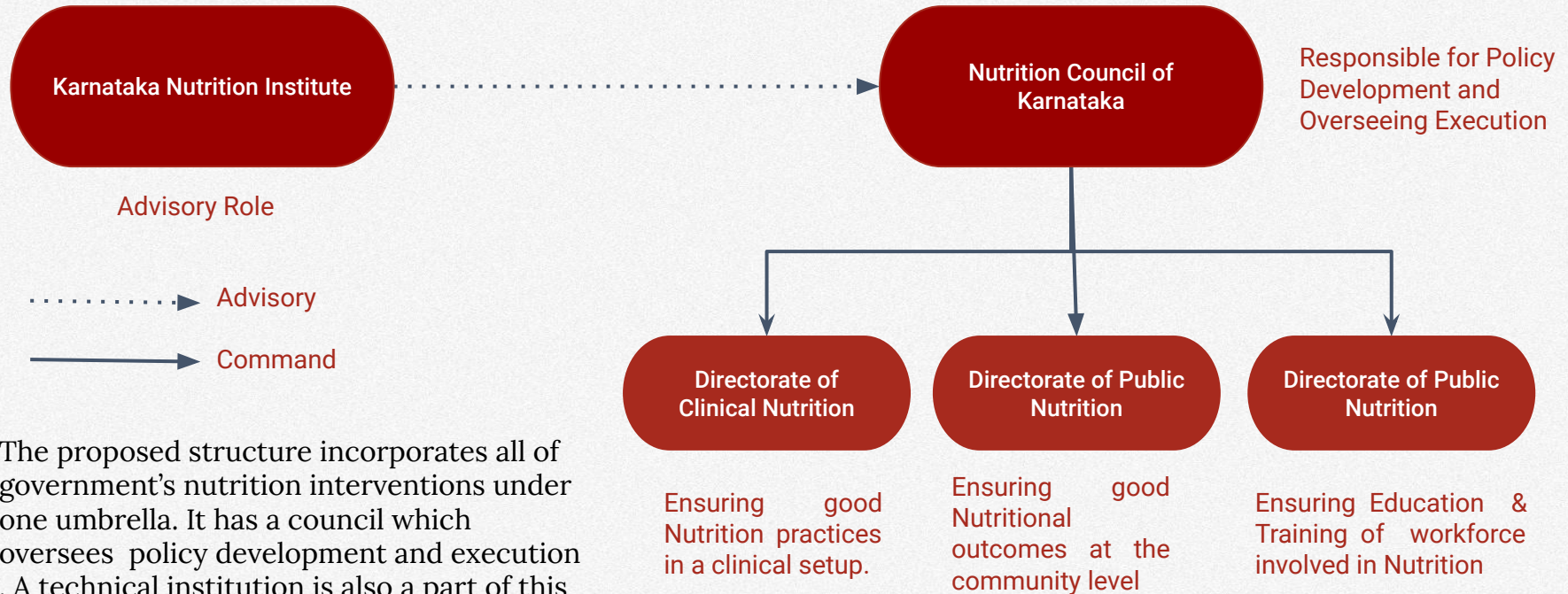
Examples: Addition of iodine to salt to prevent goitre and intellectual disabilities by the government in the National Iodine Deficiency Disorders Control Programme.

Clinical Nutrition: Interventions are focused on the individual. It starts at a healthcare facility. This includes modifying dietary factors of outpatient and hospitalised patients. The works quite well for the part of the population suffering from chronic diseases such as diabetes, high blood pressure, heart diseases etc. These diseases require constant medical guidance to prevent deterioration and maintain control. The clinical or individualised approach is the better way to target obesity related malnutrition. The main aim of this approach is preventing progression and recurrence of diseases.

Proposed Structure



Proposed Structure Of the Department of Nutrition



The proposed structure incorporates all of government's nutrition interventions under one umbrella. It has a council which oversees policy development and execution . A technical institution is also a part of this .Execution is done via two prongs; Clinical Nutrition and Public Nutrition.

DEPARTMENT OF NUTRITION



DEPARTMENT OF NUTRITION AND AGRICULTURE (DNA)

Composed of:

Nutrition Council of Karnataka

Karnataka Nutrition Institute

Directorate of Clinical Nutrition

Directorate of Public Nutrition

*Directorate of Education and
Training*

Primary Department responsible for Nutrition Health of the population. & encompass all nutrition interventions made by the government.

It will takeover the existing nutritional programs and divisions from other departments.

Headed by the Minister of Nutrition & the Principal Secretary.

The Department will take three approaches to improve Nutrition status of the State.

Health Primary Approach: Via health maintenance, promotion and prevention of disease onset

Medical Care, Secondary Prevention Approach:
Via treatment of disease & Prevention of recurrence

Welfare Tertiary Prevention:
via treatment of disease & long term care.

NUTRITION COUNCIL OF KARNATAKA



NUTRITION COUNCIL OF KARNATAKA

Primary Role

*Ensuring Betterment of
Nutrition outcomes in the State*

Divisions

1. Nutrition Policy Division
2. Technical Division
3. Statistics Division
4. Evaluation Division
5. Congruence Division

Headed By

Principal Secretary of the State

Autonomy

Autonomous

Oversight

Board



NUTRITION COUNCIL OF KARNATAKA

Primary Role

*Ensuring Betterment of
Nutrition outcomes in the State*

Responsible for overseeing all nutrition related activities in the State.

It will be made up of five divisions.

Nutrition Policy Division:

Responsible for creating and evaluation of nutrition policy in the State.

Technical Division:

Responsible for creating technical guidelines with input from various stakeholders & institutions.

Statistics Division:

Responsible for collection of data from the Department of Nutrition. It will also be conducting Annual Nutrition Surveys & other periodic data collection & evaluation. It will make sure to release data publicly.



NUTRITION COUNCIL OF KARNATAKA

Primary Role

*Ensuring Betterment of
Nutrition outcomes in the State*

Evaluation Division:

Responsible for evaluation of various nutrition related programmes and schemes run by the state. It is also responsible for doing block and district analysis of these programmes and schemes in coordination with the statistics division.

Congruence Division:

Responsible for coordination between Department of Nutrition with Department of Agriculture, Department of health & family welfare, Department of women & child welfare, Department of rural development & panchayat raj, Department of finance etc.

A Board will be constituted. It will be made up of the Chief Secretary of the State, Nutrition & Health Experts & few people nominated by the Chief Minister. It will Oversee the Council.



DIRECTORATE OF CLINICAL NUTRITION

Primary Role

Ensuring good Nutrition practices in a clinical setup.

Divisions

1. Regulation and Compliance Division
2. Continued Education Division

Headed By

Secretary (Clinical Nutrition)

Autonomy

Subordinate to DNA

Oversight

Nutrition Council of Karnataka



DIRECTORATE OF CLINICAL NUTRITION

Primary Role

Ensuring good Nutrition practices in a clinical setup.

Directorate will be responsible for the Clinical Nutrition in the State .

It will have two divisions.

Regulation and Compliance Division:

Responsible for setting & enforcing rules & regulations related to nutrition in a clinical care setting. It will also oversee integration of nutrition into clinical practice.

Continued Education Division:

Responsible for providing training and education in nutrition to existing healthcare workforce i.e. Doctors, Nurses, Dentists etc.

These two divisions will also liaison with professional bodies of medical and nutritional workers. They will make sure that professional licencing rules & regulation related to clinical practice are followed.



DIRECTORATE OF PUBLIC NUTRITION

Primary Role

Ensuring good Nutritional outcomes at the community level

Divisions

1. Public Health Division
2. Food Distribution Division
3. Nutrition Education and Promotion Division

Headed By

Secretary (Public Nutrition)

Autonomy

Subordinate to DNA

Oversight

Nutrition Council of Karnataka



DIRECTORATE OF PUBLIC NUTRITION

Primary Role

Ensuring good Nutritional outcomes at the community level

This directorate will finally be responsible for Nutrition outcomes at a community level.

It will be divided into three divisions.

Public Health Division:

Responsible for setting up & running Nutrition wellness population centres(NWC) with sub centres as per requirement. One NWC is to be set up for every 15,000 people. This division is to also manage running of Mobile Nutrition centres for educating and awareness.

Food Distribution Division:

Responsible for providing dry ration to the food insecure population. It is also in charge of income support related to nutrition.



DIRECTORATE OF PUBLIC NUTRITION

Primary Role

*Ensuring good Nutritional
outcomes at the community
level*

It will also oversee school meals. It will supervise designing & ensure well balanced meals are served in community spaces like factories, offices & schools. It will also in charge of Food standards, adulteration, testing, labelling & promotions.

Nutrition Education & Promotion Division: Responsible for creating awareness & educating the population regarding nutrition labelling & promotions.



DIRECTORATE OF EDUCATION AND TRAINING

Primary Role

*Ensuring Education & Training
of workforce involved in
Nutrition*

Divisions

1. Community Nutritionist Division
2. Healthcare Nutritionist Division
3. Nutrition Education Division

Headed By

Secretary (Education and Training)

Autonomy

Subordinate to DNA

Oversight

Nutrition Council of Karnataka



DIRECTORATE OF EDUCATION AND TRAINING

Primary Role

*Ensuring Education & Training
of workforce involved in
Nutrition*

This directorate will be responsible for educating and training of all nutrition workforce.

Its three divisions will be responsible different type of healthcare workers.

Community Nutritionist Division:

Responsible for training of Nutritionist who will be working at a community level.

Healthcare Nutritionist Division:

Responsible for training of Nutritionist who will be working in Hospitals, clinics and other setups.



DIRECTORATE OF EDUCATION AND TRAINING

Primary Role

*Ensuring Education & Training
of workforce involved in
Nutrition*

This will be done by regulating & supporting the courses via Undergraduate and Postgraduate Education boards. These will make regulations and rules regarding these courses and colleges. These divisions will be also be of making sure that there are enough Community & Healthcare Nutritionists in the State.

Nutrition Education Division:

Responsible for making sure that other healthcare courses such as MBBS, BDS, BSc Nursing etc have requisite nutrition coursework & the graduates of these courses have adequate nutrition knowledge.

KARNATAKA NUTRITION INSTITUTE



KARNATAKA NUTRITION INSTITUTE

Primary Role

*Research into Nutrition and
Food.*

Divisions

1. Research Division
2. Technical Advisory Division

Headed By

Specialist in Nutrition and Health

Autonomy

Autonomous

Oversight

Board

KARNATAKA NUTRITION INSTITUTE

Primary Role

*Research into Nutrition and
Food.*

Responsible for Research into Nutrition & Food.

It will have two divisions.

Research Division:

Responsible for research into agriculture & animals. It will be doing clinical & biomedical research related to nutrition.

Technical Advisory Division:

Responsible for coordinating & providing technical advice to Technical Division of Nutrition Council of Karnataka.





KARNATAKA NUTRITION INSTITUTE

Primary Role

*Research into Nutrition and
Food.*

It is also responsible for starting and running three subordinate research institutions. These will focus their research on their respective areas of the state. They will be placed at following places.

Belagavi

Kalaburagi

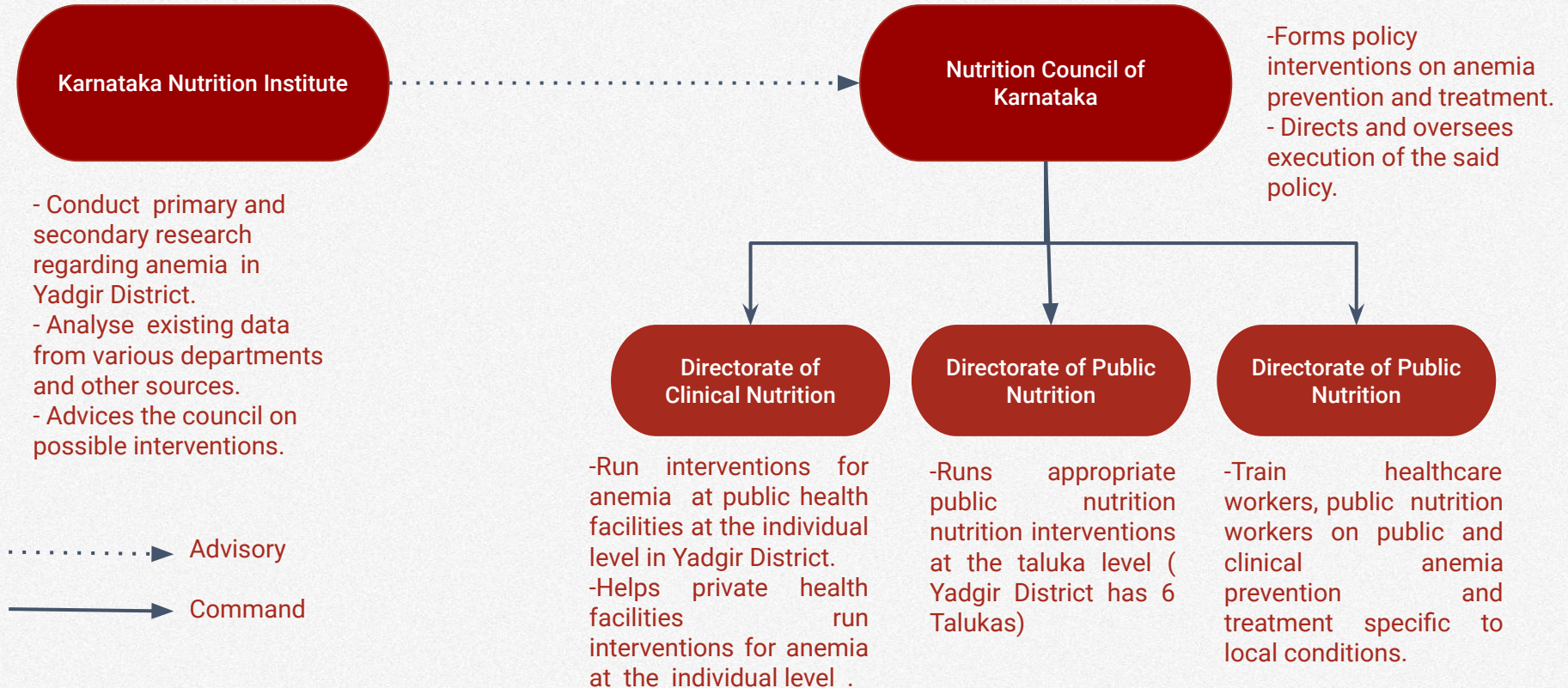
Mysuru

Karnataka Nutrition Institution will be responsible for Bengaluru area.

REDUCING ANEMIA IN YADGIR DISTRICT



Reducing Anemia In Yadgir District





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