By their very nature, complex problems are often not well defined and lacking precise problem statements. Skills to structure and model problems, and formalise and represent domain knowledge, create pathways to solutions for complex domains.

**Problem Structuring Expertise**
- General Morphological Analysis (GMA)
- Computer-Aided Resource for GMA (CARMA)
- Bayesian Network (BN)

**Domain Knowledge Representation**
- Ontology Development
- Problem Modelling
- Scenario Experimentation
General Morphological Analysis

The CSIR has a proven methodology and the capabilities that can assist with structuring and analysing multi-dimensional technical and social problem spaces. These spaces are inherently non-quantifiable, contain non-resolvable uncertainties, cannot be causally modelled or simulated and require a judgemental approach.

Ontology Development

- An ontology consists of concepts, attributes, inter-concept relationships and domain logic.
- An ontology provides a shared domain vocabulary.
- Inference engines allow us to reason about the facts contained in an ontology.