CHAPTER: 2 OBJECTIVE AND RATIONALE

As per research methodology of Reverse Pharmacology described by A.D.B. Vaidya (Vaidya ADB, 2006), the objectives of the research work done in this thesis is categorized into four phases:

**Phase 1: Identification and validation of plant material, extract and formulation development**

Specific objectives in this phase include:

- Standardization of the plant material
- Standardization of the plant extract
- Development of formulation(s) for in-vitro, in-vivo and clinical evaluation

**Phase 2: In-vitro and in-vivo (preclinical) evaluation of herbal formulation(s) for safety and efficacy**

Specific objectives in this phase include:

- In-vitro evaluation of anti microbial (bacterial and fungal) properties of plant extract against skin pathogens
- In-vitro evaluation of antioxidant properties of plant extract
- Preclinical evaluation of herbal formulation for safety
- Preclinical evaluation of herbal formulation for wound healing
Phase 3: Clinical evaluation of herbal formulation(s) for safety and efficacy

Specific objectives in this phase include:

- Evaluation of clinical safety and efficacy of herbal formulation for psoriasis with positive control

Phase 4: Molecular docking study

Specific objectives in this phase include:

- Biochemical markers identification
- Biochemical markers selection
- Molecular docking study