# Child Protection Index Computation Methodology

## 1. Approach:

A composite index helps to group a number of indicators falling under different dimensions in a standardized way. It is a useful statistical measure to assess overall performance of a region over a period of time. A total of 48 indicators that fall under three broad dimensions were used to calculate the overall composite index. The three broad dimensions are:

  i.   Results for Children
  ii.  Human Resource
  iii. ICPS Structure and Functionality

List of indicators for each of the dimensions are provided in Annexure-I.

All the districts' relative positions are identified under four indices that are computed from the data available for the 48 indicators. The four indices are:

  i.   Index - Results for Children
  ii.  Index - Human Resource
  iii. Index - ICPS Structure and Functionality
  iv.  Index – Overall

## 2. Methodology for computing index:

The identified indicators used for computation of index might be either positive or negative. The indicators that are positively associated with child protection are considered as positive indicators and the ones that are negatively associated are considered as negative indicators. Before computing the four indices, it is required to calculate the index value for individual indicator for each district. The index value is calculated on the basis of nature of the indicator, i.e. positive indicator or negative indicator.

### 2.a. Positive Indicator

Let $X_{id}$ represent the value of the $i^{th}$ indicator in the $d^{th}$ district of a state (i = 1,2,3,…..48 ; d = 1,2,3,…..32). Index has been calculated for 32 districts in Tamil Nadu.

If an indicator $X_i$ is positively associated with child protection, like Percentage of children (children in need of care and protection or children in conflict with law) for whom Individual Care Plan exists, index is computed using the following formula:

$$Index\ Value\ X_{id}\ =\ \frac{X_{id} - Min(X_{id})}{Max(X_{id}) - Min(X_{id})}$$

## 2.b. Negative Indicator

If an indicator $X_i$ is negatively associated with child protection, like children (children in conflict with law) whose cases are pending for more than 90 days, index is computed using the following formula:

$$Index\ Value\ X_{id} = \frac{Max(X_{id}) - X_{id}}{Max(X_{id}) - Min(X_{id})}$$

Where Min $(X_{id})$ and Max $(X_{id})$ are, respectively, the minimum and maximum of $(X_{i1}, X_{i2}, X_{i3}..... X_{in})$ for that particular indicator across districts in a State.

The normalized index values of each of the n indicators for a district are then combined by using simple average to arrive at dimension specific composite index for each districts as follows:

$$Dimension\ specific\ Composite\ Index\ for\ d^{th}\ district = \frac{\sum_{i}^{n} X_{id}}{n}$$

$$*d = 1, 2, 3...32;\ 27\ districts$$
$$i = 1, 2, 3...n;\ n\ indicators$$

In the above formula "n" as number of indicators varies for all the districts for the three dimensions. E.g., In Human Resource dimension there are 21 indicators, Results for Children has 14 indicators and ICPS Structure and Functionality has 13 indicators.

To calculate the overall composite index across three dimensions, the following formula is referred:

$$Index\ -\ Overall = \frac{Index\ -\ Results\ for\ Children\ +\ Index\ -\ Human\ Resource\ +\ Index\ -\ ICPS\ Structure\ and\ Functionality}{3}$$

Equal weightage is given to all the index values while calculating the composite index. Composite index ranges from 0 to 1. Values nearing to 0 implies poor performance while values nearing to 1 implies better performance.

# Annexure – I:  List of Indicators used in computing index

| Composite Indicators | Sl. No. | Indicators ("i") |
|---|---|---|
| Index- Results for Children | 1 | Percentage of Children (CNCP) for whom ICP exists |
| | 2 | Percentage of Children (CCL) for whom ICP exists |
| | 3 | Percentage of Children ordered to shelter in Special Home |
| | 4 | Percentage of Children (CNCP) Covered in After care programme |
| | 5 | Percentage of Children (CCL) Covered in After care programme |
| | 6 | Percentage of Children (CNCP) for whom Social Investigation Report (SIR) is submitted |
| | 7 | Percentage of Children (CCL) for whom Social Investigation Report (SIR) submitted |
| | 8 | Percentage of Children  counselled on committing offences more than once |
| | 9 | Percentage of children (CNCP) cases pending for more than 120 days |
| | 10 | Percentage of Children (CCL) Cases pending for more than 120 days |
| | 11 | Percentage of children received victim compensation fund |
| | 12 | Percentage of children awaiting adoption for more than 90 days |
| | 13 | Percentage of children pending under sponsorship scheme |
| | 14 | Percentage of Children who are in Foster Care |
| | 15 | Percentage of Children covered in Sponsorship scheme |
| | 16 | Percentage of Home Study Reports completed for PAPs |
| | 17 | Percentage of Children who are being adopted |
| | 18 | Percentage of child marriage cases stopped |
| | 19 | Percentage of child labourers rehabilitated through back to school programme |
| | 20 | Percentage of child labourers enrolled who drop out of school after rehabilitation |
| Index - Human Resource | 21 | Percentage of missing children found |
| | 22 | Percentage  of CWCs with all posts filled (One Chair and four members) |
| | 23 | Percentage of female member in CWC |
| | 24 | Percentage of JJBs with all posts  filled (One Chair and two members) |
| | 25 | Percentage of female member in JJB |
| | 26 | Percentage of SJPUs with all posts filled |
| | 27 | Percentage of female members in SJPU |
| | 28 | Percentage of DCPUs with all sanctions filled (12numbers of staffs) |
| | 29 | Percentage of Police Stations with at least one CWPOs |
| | 30 | Percentage of female CWPOs available in police stations |
| | 31 | Percentage CCIs staff members who received training on Juvenile Justice |
| | 32 | Percentage of members in CWC who received training |
| | 33 | Percentage of members in JJB received training |
| | 34 | Percentage of members in SJPU received training |
| | 35 | Percentage of members in DCPU received training in last quarter |
| Index - ICPS Structure and Functionality | 36 | Percentage of District Child Protection Committee (DCPC) set up |
| | 37 | Percentage of Block level Child Protection Committee (BLCPC) set up |
| | 38 | Percentage of Village level Child Protection Committees (VLCPC) set up |
| | 39 | Percentage of Collector DCPC headed review meetings |
| | 40 | Percentage of CCIs registered under JJAct |
| | 41 | Percentage of sittings held by CWC in the prescribed time period |
| | 42 | Percentage of sitting held by JJB |
| | 43 | Percentage of (CNCP) cases resolved by CWC in the prescribed period |
| | 44 | Percentage of (CCL)cases resolved by JJB |
| | 45 | Percentage of ICPS funds utilised in the prescribed period |
| | 46 | Percentage utilisation of victim compensation fund |
| | 47 | Percentage of Quarterly Progress Report (QPR) submitted |
| | 48 | Percentage of CCIs submitted Monthly Report (MR)  before DCPO |
| | | |
| Index - Overall | | Comprises of all the three dimensions |