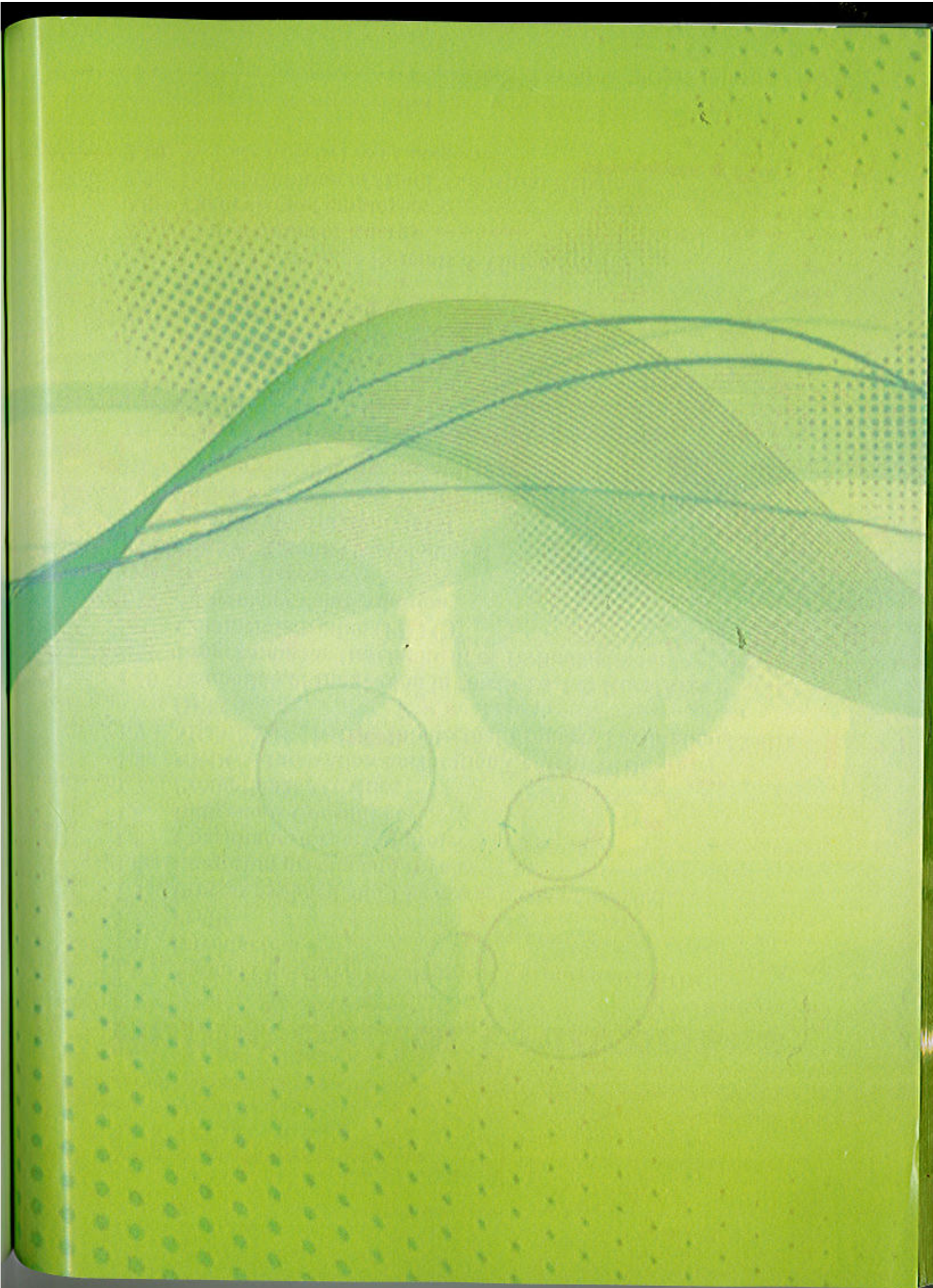


# **CHAPTER-7**

## **Public Sector Enterprises**

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# PUBLIC SECTOR ENTERPRISES

## 1.0 NATIONAL RESEARCH DEVELOPMENT CORPORATION

### 1.1 Introduction

National Research Development Corporation (NRDC) is a Government of India enterprise, under the Administrative control of Department of Scientific & Industrial Research (DSIR), established in 1953 under section 25 now section 8, of the companies act. The main objective is to promote, develop and commercialize technologies/know how/inventions/patents/processes emanating from various national R&D institutions. The Corporation offers its services through-out the country in improving the Nation's manufacturing base with innovative technologies specially suitable for our entrepreneurs and conditions. It acts as an effective Interface for translating R&D results into marketable products. Over the last more than six decades of its existence, the Corporation has forged strong links with various R&D organizations both within the country and abroad and pursued bringing inventions and innovations to commercial fruition. The Corporation is recognized as a repository of a wide range of technologies and has licensed technologies to over 5000 entrepreneurs



Fig. 1 NRDC Awarded with 'Best PSU Award' by Governance Now

spread over almost all areas of industry and has provided assistance for filing of 1800 patents.

### 1.2. Profit

The highlights of the performance and the financial result for the financial year ended 31<sup>st</sup> March 2017 are given below:

Performance Parameters	2016-17* (Rs. in lakhs)	2017-18 (Rs. in lakhs)
Gross Income	1133.03	1471.17
Revenue from Operations	1074.24	1372.61
Other Income	58.79	98.56
Profit Before tax	62.29	134.24
Paid up Share Capital	441.81	441.81
Reserves & Surplus	501.38	469.64
Net Worth	943.19	911.45

\* Figures for the year 2016-17 were regrouped wherever necessary for the purpose of comparison.

As per the pre-revised Accounting Policy of the Corporation, the Gross Income for the financial year under report is ₹ 2683.51 lakhs as compared to Previous Year's Gross Income of ₹ 2627.64 lakhs, resulting in real increase in Gross income to the tune of ₹ 55.87 lakhs. This increased gross income is on account of increase in royalty from PATSER/TDDP projects compared to previous year.

### 1.3. Processes Assigned and Licence Agreements Concluded

The Corporation continued to lay emphasis on broadening and strengthening the technology resource base by nurturing long-term relationships with R&D institutions as well as universities, technical organizations, industries and also individual inventors. This endeavour is reflected in the Corporation's



signing of 40 MOUs/MOAs/Agreements (Annexure 14) with Institutions/Organizations for intellectual property protection, technology commercialization, technology consultation and other value-added services. Some of the major institutions are as under:

1. CSIR-Advanced Materials and Processes Research Institute (AMPRI), Bhopal
2. Orissa University of Agriculture & Technology, Bhubaneswar
3. Jawaharlal Nehru University (JNU), New Delhi
4. CSIR-Central Scientific Instruments Organisation (CSIO), Chandigarh
5. CSIR-National Geophysical Research Institute (NGRI), Hyderabad
6. Indian Institute of Information Technology, Hyderabad
7. International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), Hyderabad
8. The Tribal Cooperative Marketing Development Federation of India (TRIFED), New Delhi
9. Indian Institute of Technology, Roorkee



Fig. 2 NRDC Inks MOA with CSIR-CSIO, for "Commercializing IPs & Technology"

### Process Assigned

During the financial year 135 new processes/technologies (Annexure 15) were assigned to the Corporation for licensing, as compared to 108 processes in the previous year. Some of the commercially important processes assigned to the Corporation from various research institutes, universities were:

### CSIR-Central Scientific Instruments Organization

- Surgical microscope for eye surgery
- Electronic Knee
- Iodine Value Meter



Fig. 3 NRDC Signed MOA with PROM Society, New Delhi for commercialisation of "PHOSPHATE RICH ORGANIC MANURE (PROM)"

### CSIR-Central Mechanical Engineering Research Institute

- Domestic Arsenic Water Filter Unit
- Domestic Arsenic Water Filter Unit
- Solar Park

### ARCI, Hyderabad

- Advanced Detonation Spray Coating Technology (DSC) MARK-II
- Detonation Spray Coating (DSC) Technology
- PEM Fuel cell Powered Materials Handling Devices
- Nano silver Impregnated Ceramic Candle Filter
- Exfoliated Graphite and its value added products

### CSIR-CSMCRI

- Preparation and applications of non-hazardous brominating reagent
- Preparation of industrially important organo-bromo compounds using brominating reagent
- Processes for the production of seaweed liquid fertilizer from brown seaweed