



## Chapter 4 Sale of data products

**Audit Objective 2: To assess whether the sale of data products resulted in maximisation of revenue.**



**Sale of data products**

### Sale of data products

**4.1** Remote Sensing Data Policy in 2001 opened up the sale of data products on non-discriminatory basis to customers. NRSC, therefore, was to take this opportunity and understand the requirements of the private customers to customise its products and services to suit the requirements of the private customers and increase the sale of data products to make remote sensing data utilisation programme sustainable. The Standing Committee of Parliament on DOS for the year 1996-97 observed that *'remote sensing is developing into a major source of activity for national development. There is a large magnitude of value addition to the remote sensing data which could be used in marketable form in several disciplines, in Government and Non-Government. Therefore, committee felt that more and more private entrepreneurs should be associated in the process of remote sensing data utilisation programme'*.

In this context, the sector wise details of satellite data products sold during the period 2003-04 to 2008-09 are given in **Table 5**.



**Table 5**  
**Data Product Sale**

(Amount: ₹ in crore)

Sector	Government Sector <sup>26</sup>		Private Customers <sup>27</sup>		Total	
	Number of products (per cent)	Revenue realised (per cent)	Number of products (per cent)	Revenue realised (per cent)	Number of products	Revenue realised
2003-04	14723 (83)	19.83 (81)	3081 (17)	4.58 (19)	17804	24.41
2004-05	16317 (86)	29.54 (85)	2750 (14)	5.14 (15)	19067	34.68
2005-06	16996 (86)	30.05 (85)	2709 (14)	5.28 (15)	19705	35.33
2006-07	23087 (87)	36.79 (88)	3391 (13)	5.07 (12)	26478	41.86
2007-08	31291 (85)	39.73 (83)	5510 (15)	8.22 (17)	36801	47.95
2008-09	32997 (79)	32.22 (78)	8571 (21)	9.3 (22)	41568	41.52

Even though the sale to Private Sector increased marginally<sup>28</sup>, we observed that the average sales to the Private Sector was less than 20 *per cent* whereas the sales to the Government Sector was more than 80 *per cent* during the period 2003-09.

DOS replied in July 2009 that the Private Sector procured high resolution data, mainly for infrastructure and utility mapping applications and this was made available by the launch of Cartosat 1 and 2 satellites. Reply of DOS needs to be viewed in the context of the comparative low sales in Private Sector and the recommendation of Standing Committee of Parliament on DOS regarding increase in sales to the Private Sector. Also, high resolution data was available through IRS 1C as early as from 1995. Further, despite launch of Cartosat-1 in May 2005 and Cartosat-2 in January 2007, the sale in Private Sector did not increase significantly. This indicated that the efforts of NRSC were not adequate in customising the data according to the needs of private users and also in exploring the possibility of widening the customer base.

#### International rate of data products

**4.2** Indian remote sensing data products are sold to Indian customers (including those in SAARC countries) directly by NRSC. For international customers, NRSC sells data products through ACL at 2.5 times the Indian price. This price includes ACL's agency commission of 100 *per cent*. NRSC also procures foreign satellite data directly from RADARSAT, IKONOS, QUICKBIRD, etc., on demand.

<sup>26</sup> DOS/NRSC, Central & State Governments.

<sup>27</sup> Academic, Private and Foreign Customers.

<sup>28</sup> During the period 2007 to 2009.



We observed that the prices charged by NRSC for high resolution IRS data products sold to ACL ranged between US \$ 0.08 and US \$ 2.5 per square kilometer. For the same high resolution data products, ACL charged between US \$ 0.16 and US \$ 8.6 which works out to an average of US \$ 4.38 in the international market. In comparison, the charges for similar high resolution data in the international market, which is based on market trends, ranged between US \$ 17 and US \$ 35 per square kilometer which worked out to an average of US \$ 26. Thus, the international market rate of high resolution satellite data was about six times<sup>29</sup> that of the price of IRS data. The comparison of rates of IRS with the international rates for similar products is given in **Table 6**.

**Table 6**  
**Comparison of International Price with IRS prices for data products**

(Amount: ₹ in crore)

Year	Sales value of IRS products (international sales)	Sale value of IRS data product at average international market price	Difference
(1)	(2)	(3) = (2)*26/4.38	(4) = (3) - (2)
2004-05	1.46	8.67	7.21
2005-06	1.94	11.52	9.58
2006-07	1.96	11.63	9.67
2007-08	4.26	25.29	21.03
<b>Total</b>	<b>9.62</b>	<b>57.11</b>	<b>47.49</b>

It can be seen from the above table that the prices of high resolution satellite data in the international market were six times more than the prices of comparable IRS products. There was, therefore, scope for enhancing the revenue from the sale of data products to international customers by ₹ 47.49 crore.

DOS stated in July 2009 that missions with similar resolution and products type should be considered for meaningful comparison. It was also stated that while pricing the Cartosat-2 products, a strategic pricing policy had to be adopted to help penetrate the global market.

The reply of DOS needs to be viewed in light of the fact that the comparison was made only on the basis of prices of similar and comparable high resolution (black and white) data. There is, therefore, a need to streamline pricing of IRS data products for international customers. This will also enhance the revenue from remote sensing satellites.

<sup>29</sup> The average price of high resolution (Black & White) data in the international market, viz., US \$ 26 is about six times of US \$ 4.38 being the price of similar IRS data.

**Conclusion**

The efforts of NRSC were not adequate in customising the data according to the needs of private users and also in exploring the possibility of widening the customer base. The sale of data products to private users did not improve as recommended by Standing Committee of Parliament of DOS. Further, there was scope for enhancing the rates of IRS data products in line with international rates.

**Our Recommendations****Action proposed by NRSC on recommendations**

5. With a view to maximising revenue, NRSC/DOS needs to take proactive steps to enhance usage of data products by private enterprisers in India.

*NRSC stated in February 2010 that it would continue to strive to hold hands with private entrepreneurs in enhancing their skill-sets to handle satellite data products and services. It was also planned to enhance their participation in the training programmes and maximise the products and services including application services dissemination to the user community through web-based portals.*

6. NRSC may streamline pricing of IRS data products, especially pricing of products sold internationally, by considering the pricing of similar products in international markets.

*NRSC stated in February 2010 that they would periodically revisit the pricing policy and restructure the same keeping in mind the costing principles and the pricing strategy in tune with the user aspirations and market sentiments. NRSC also stated that it was in the process of entering into a Memorandum of Understanding (MoU) with ACL for international distribution of satellite data. The draft of the MoU was being finalised and was expected to be ready shortly.*

