

## **Inclusive Flow of Funds Accounts and Cooperative Sector**

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### **Abstract**

Flow of Funds (FoF) Account is systematic record of net financial transactions involving financial instruments during a year. FoF is gaining prominence over time to capture the dynamics of the financial system flows and hence, the need to improve its coverage and reliability too is recognised by Rangarajan Committee on Savings and Investment, 2009 and Working Group on Flow of Funds under Deepak Mohanty, 2015. While several of their recommendations have been implemented and many others are underway, cooperative system poses a different challenge. Also, inclusion of Water Users Associations (WUAs), Producers Organisations (POs), Micro Financing Institutions (MFIs) can make FoF accounts more inclusive. This paper discusses issues relating to improving the coverage of cooperatives, WUAs, POs, and MFIs, among others.

*Key Words:* Flow of Funds Account, Financial System, Rural Cooperatives, Financial Instruments

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### **1. Introduction**

Macro-economic statistics play a very important role in policy making. While the importance of data has been realised well from the beginning and a huge architecture is established to compile macro level statistics, the data needs have been growing in quantity as well as in complexity. As our computing capabilities have increased overtime and we are able to make sense out of every piece of information in relation to the rest, it is being realised that the existing system needs some fine tuning and some revamping. Future of policy making lies in developing our ability to compile Big Data and analyse it. One of the exercises that Reserve Bank of India (RBI) has been compiling for the financial sector as a whole is the Flow of Funds (FoF) Accounts. It has been compiling these reports since 1959 covering period from 1951-52 onwards. It is done annually the latest being for the year 2014-15.

The FoF account is a systematic record of net financial transactions involving financial instruments within given period of time. The major problem once faced in preparation of FoF is availability of accurate data in time. Due to long time gaps in data availability from various sources, the FoF accounts are compiled with a lag time of almost 2 years. Data from Cooperatives form part of the FoF and are often form the weakest link. In this paper we first

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briefly describe FoF in the Indian setting, expert views on improving it and then discuss the availability of data on cooperatives and issues relating to its timely availability.

## 2. Flow of Funds

FoF accounts, prepared annually by Reserve Bank of India, map instrument-wise financial flows across five major institutional sectors of the Indian economy on a ‘from-whom-to-whom’ basis. These institutional sectors (Table 1) comprise (i) financial corporations (FCs); (ii) non-financial corporation (NFCs) including in both public<sup>3</sup> and private sectors; (iii) general government (GG) comprising both central and state governments<sup>5</sup>; (iv) the household (HH) sector; and (v) the rest of the world (RoW). Financial instruments include currency, deposits, debt securities, loans and borrowings, equity, investment funds (such as mutual funds), insurance, pension and provident funds, monetary gold, other accounts (including trade debt) and other liabilities/ assets not elsewhere classified (Others n.e.c.).

**Table 1: Sectoral Classification of Flow of Funds**

<b>Financial Corporations (FCs)</b>	<b>Central Bank</b>	<b>Commercial Banks</b>
	<b>Other Depository Corporations (ODCs)</b>	<b>Cooperative Banks</b> <b>Deposit taking NBFCs</b> <b>Deposit taking HFCs</b>
	<b>All India Financial Corporations (OFCs)</b>	<b>All India Financial Institutions</b> <b>Non-deposit taking NBFCs</b> <b>Non-Deposit taking HFCs</b> <b>Insurance Corporations</b> <b>Pension &amp; Provident Funds</b> <b>Mutual Funds</b>
<b>Non-Financial Corporations (NFCs)</b>	<b>Public NFCs</b> <b>Private NFCs</b>	
<b>General Government (GG)</b>	<b>Central Government</b> <b>State Governments</b>	
<b>Households (HH)</b>		
<b>Rest of the World (RoW)</b>		

Source: RBI (2017)

### Highlights of FoF estimates for the year 2015-16

Table 2 gives sectoral financial resource balance for three years from 2013-14 to 2015-16. Sectoral financial resource balance is the difference between net acquisitions of financial assets over net increase in liabilities expressed as percentage of net national income (NNI). The economy as a whole moved towards surplus of 0.7 per cent of NNI in 2015-16 compared to deficit in 2013-14 and marginal surplus in 2014-15. The HH and FC sectors showed surplus while GG and NFC sectors had deficit.

**Table 2: Sectoral Financial Resource Balance**  
(% of Net National Income at current market prices)

Components	2013-14	2014-15	2015-16
<b>1 Non-Financial Corporations(NFCs)</b>	<b>-6.4</b>	<b>-5.1</b>	<b>-4.6</b>
a. Public Non-Financial Corporations (PuNFCs)	-2.6	-2.4	-2.9
b. Private Non-Financial Corporations (PvNFCs)	-3.8	-2.7	-1.7
<b>2 Financial Corporations (FCs)</b>	<b>2.6</b>	<b>2.5</b>	<b>1.8</b>
<b>3 General Government (GG)</b>	<b>-5.8</b>	<b>-5.7</b>	<b>-5.5</b>
<b>4 Household Sector (HH)</b>	<b>8.4</b>	<b>8.4</b>	<b>9.0</b>
<b>5 Total (1+2+3+4)</b>	<b>-1.2</b>	<b>0.1</b>	<b>0.7</b>

Source: RBI (2017)

The FoF account estimates also revealed that the financial resource gap of the economy narrowed further in 2015-16. 'Loans and borrowings' are emerging the most preferred financial instruments in place of currency and deposits. Indian economy is diversifying from a traditionally bank-based financial system. However, to propel a virtuous cycle of growth, the size, depth and liquidity of the financial markets need to increase. Within the financial sector, liabilities of other depository corporations, which constitute mainly banks, declined mainly due to lower overall deposits. Non-bank financial corporations (NBFCs) grew in importance as suppliers of finance in the Indian economy. The financial surplus of the household sector continued to increase during the year and this sector would continue to act as the lynchpin to Indian financial flows.

### 3. Improving FoF system

As FoF is gaining importance in understanding the dynamics of Indian Financial flows, the need for accuracy of estimates too is growing. Improving the horizontal coverage and reliability of data are twin strategies needed. A few committees have gone into the FoF coverage and methodology in the past and made several recommendations. A few of the recommendations and the status of implementation are discussed below.

#### Rangarajan Committee's Observations

The High Level Committee on Estimation of Saving and Investment, 2009, under the chairmanship of Dr. C. Rangarajan made a few suggestions for bettering the FoF compilation. The Committee recommended several measures including, *inter alia*:

- To regularize compilation of FoF and reduce the time lag
- A census to collect data on assets, liabilities, income and expenditure of NBFCs:
- Consolidate data of all insurance sector by IRDA
- Consolidate data of all mutual fund sector by SEBI
- To improve the time gap of release of data by cooperative sector
- Data on local self governments to be compiled

The time lag could be reduced from 21 months to 17 months since the publication of FoF for 2014-15. It may not be possible to reduce time lag after some point. All other recommendations are implemented except the last two where only partial progress could be made. This paper elaborates on cooperative statistics and difficulties there off.

### **Working Group on FoF**

Subsequently, the Working Group on Compilation of Flow of Funds Accounts of the Indian Economy under the chairmanship of Dr. Deepak Mohanty which submitted its report in 2015 made several recommendations that can be grouped into short term and medium/long term. Short Term measures were regarding

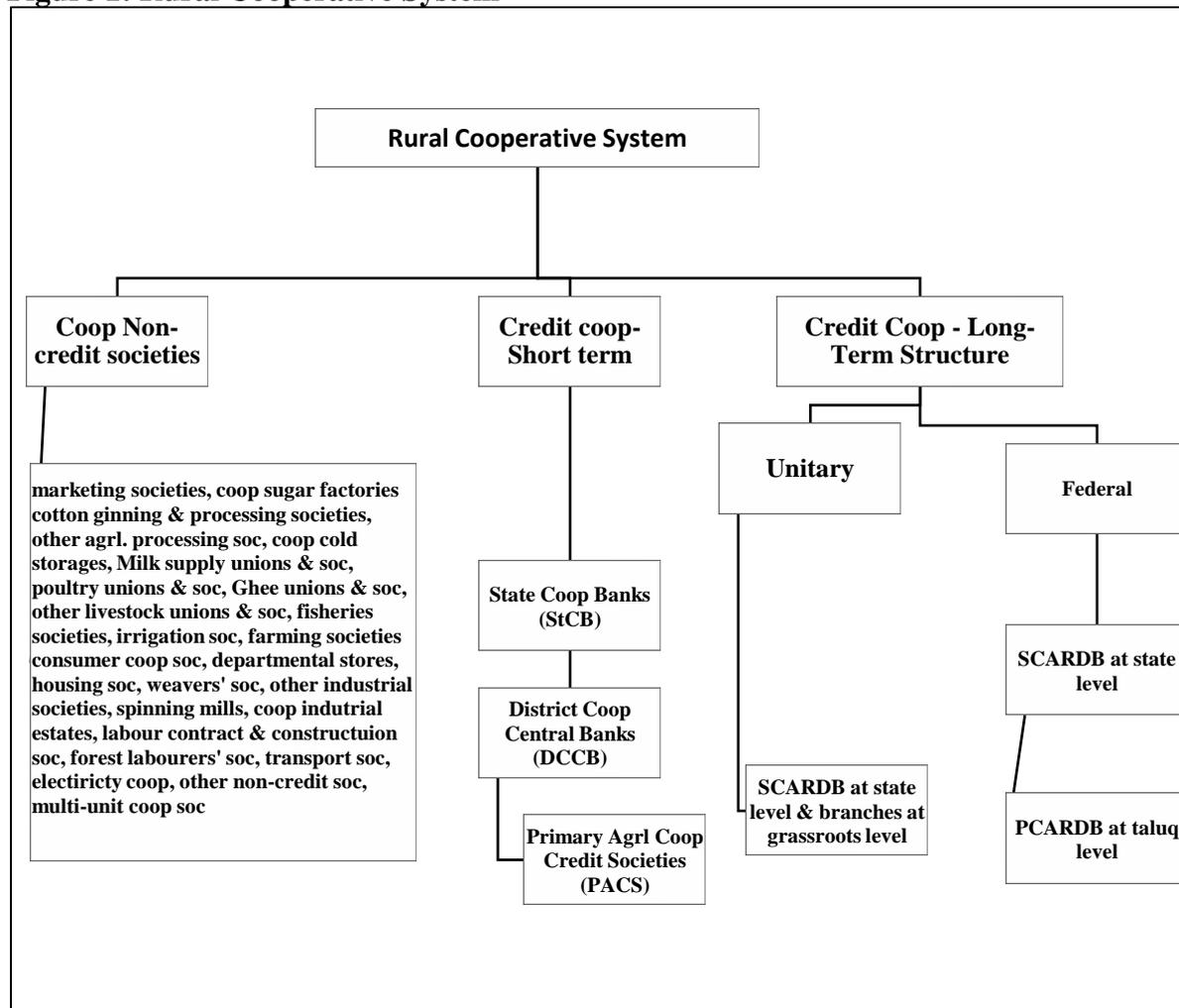
- Sectorisation in line with System of National Accounts (SNA), 2008,
- Re-classification of Sub-Sectors, and
- Financial Instruments

All of these were implemented. Medium to Long Term recommendations which were yet to be completely implemented are listed below:

- include State Public Sector Enterprises (SPSEs), Producer Companies, Medium and Small Manufacturing Enterprises (MSMEs) and Water Users' Association under Non-Financial Corporation sector;
- include financial auxiliaries and captive financial institutions and money lenders under Financial Corporations;
- include Other Financial Institutions (OFI)- Venture Capital Funds (VCFs), Portfolio Managers and Micro-Finance Institutions (MFIs);
- include urban and rural local bodies;
- disaggregation of Financial Instruments;
- compiling and publishing the FOF accounts on quarterly basis beginning with the financial sector; and,
- automating data flow into the FOF database to the extent possible.

#### **4. Structure of Rural Cooperative system in India**

Cooperative system in the country evolved over a century and has a vast network. Cooperatives in India are of two types: credit cooperatives and non-credit cooperatives. Credit cooperatives have two types of structures dealing with short term credit and long term credit (see Sataysai and Badatya, 2000 for detailed account of cooperative system). The short term structure, usually, has three tiers consisting of State Cooperative Bank (StCB), District Cooperative Central Bank (DCCB) and Primary Agricultural Cooperative Credit Societies (PACS) at the grassroots level. Long term structure has two tiers in several states in a federal setup with State Cooperative Agricultural and Rural Development Banks (SCARDBs) at apex level and Primary Cooperative Agricultural and Rural Development Banks (PCARDBs) at the grassroots level. Other states have unitary structure with SCARDB at state level operating through its branches (Figure 1).

**Figure 1: Rural Cooperative System**

There are around 17 National Level Cooperatives looking into promotional, developmental aspects of cooperatives in India both in the field of credit and non-credit societies. The list of such cooperative institutions/ federations and their functions is given in Annexure. The basic purpose of these federations is to coordinate the functioning of its member institutions, provide support services, and compile data relating to members and give voice to the members.

## 5. Issues in Compiling of data for Flow of Funds from Cooperative Sector

The cooperative network is so variegated and widely spread across the country that getting fairly representative data with reasonable time lag is a herculean task. Notably, though several cooperatives are in the fold of these federations many others are not. As a result, the federations may not give full information. Also, except the credit cooperative federations like NAFSCOB and NCARDB which are compiling data of their member societies though not up-to-date, several other federations are not actually disseminating such information through their websites. Also, there is not much idea one gets about if such information is being compiled and if yes in what form.

Commonly cited problem with the co-operative banking system is lack of timely data. This impedes a proper assessment of their performance. Reporting of basic data on assets and liabilities for the scheduled co-operative banks is streamlined. But the data for non-scheduled

co-operative banks are still available with a considerable time lag. Non-completion of the audit process is a major issue behind the delay. Besides this, as reported in Trend and Progress of Banking 2001 by Reserve Bank of India, lack of standardisation of accounting procedures led to inconsistency across data provided for different layers of cooperative structure. The report recommended standardization of financial statements of cooperatives to match with those of commercial banks is desirable.

As far as the published data in respect of cooperative banks are concerned, the Statistical Statements relating to Cooperative Movements in India brought out by the NABARD gives comprehensive coverage of the co-operative sector in terms of number, membership, liabilities and assets and operations of various types of credit and non-credit societies. The data is delayed due to delay in submission of data by the agencies from lower tiers and delay in audit process. The data comes through Registrars of Co-operatives (RCS) who reportedly do not have sufficient supporting technical and physical manpower to collect data pertaining to non-credit cooperatives. Due to numerous agencies prevailing to cater to different sectors, mere size and variety may deter RCS from attempting such exercise effectively. Also, getting compliance from defunct societies, which are sizeable in many states, is not easy.

At NABARD, whenever data is not received from some states and for some agencies, the usual practice is to repeat data for previous years and mere unmanageable volume of data makes it impossible to carry out updating and revision. In due course of time, the fat volumes of data on credit and non-credit societies in print form has been discontinued and only CDs were prepared and distributed. Further, only key summary statistics are being printed that too only for credit cooperatives. As of now, the latest publications are: i) Key Statistics on Cooperative Banks as on 31 March 2016 (unaudited), ii) Dossier on cooperative credit Structure – Short term structure, March 2014, iii) Dossier on Long Term Cooperative Credit Structure, March 2014. The data for non-credit societies is supposed to be received from RCS with who they are registered. But, very few states such as Maharashtra, Gujarat and Rajasthan send such data regularly and in detail while other states send fragmented and incomplete data. Inconsistency is a common problem often that makes publication of data on non-credit societies still more time consuming and difficult.

One reason for delays is prevalence of semi-manual compilation and transmission of data at all levels. Data integrity also may be lost due to such system. The sheer size and number of cooperative institutions in the country, inadequate and qualified manpower makes timely data compilation a herculean task. The solution lies in computerization. The situation appears brighter now with three important developments. One, StCB and DCCBs are on Core Banking Solutions (CBS) platform and hence, MIS may get automated which speeds up the compilation process and minimizes data errors and inconsistencies. At present out of 402 StCB/DCCBs 382 (29 StCB and 353 DCCBs) are on CBS. Caution is warranted here. Mere CBS platform will not ensure data flow. Skilled manpower who can mine data are crucial. Further, Cooperatives are allowed time up to Sept of next financial year to complete audit while on CBS, cooperatives need to close accounts by 15th April. Hence, rectification vouchers to be passed in the wake of the audit observations do not reflect in CBS created balance sheets that may affect FOF accounts. Two, in the Union Budget 2017-18, it is announced that 63000 functional PACS will be linked to the CBS of respective DCCBs with an outlay of Rs.1900 crores during next 3 years. This will help bring PACS to the mainstream and capture PACS data faster and better. Three, at NABARD, new data portal, named ENSURE, has been launched in March 2015 to submit OSS Returns online by banks. ENSURE is an enterprise-level, web-enabled data collection and management system. It

helps in the convergence of onsite inspection and offsite surveillance systems, resulting in quality and timely data.

## **6. Issues observed by Dr. Rangarajan Committee and Dr. Deepak Mohanty Working Group**

The High Level Committee under Dr. Rangarajan suggested that:

1. NABARD should project loans and advances of cooperatives sector as an alternative due to time lags in getting actual data
2. The time lag should be reduced to one year instead of 4 to 5 years
3. NABARD may generate estimates whenever data is not available
4. NABARD should continue as the nodal agency and collaborate with NAFSCOB, NCUI, etc.

The Working Group under Dr. Deepak Mohanty has recommended the following to improve the flow of cooperative sector data.

- The consolidated FOF data pertaining to Cooperative Banks and societies should be provided by NABARD
- The extant FOF accounts do not give separately the information on borrowing of the StCBs and DCCBs from NABARD though it is the major source of borrowing for these StCBs and DCCBs. Hence, the Working Group recommends that the borrowing of the StCBs and DCCBs from NABARD may be shown separately in the format.
- The Working Group recommends that the feasibility of including Producer Companies and Water Users' Associations (WUAs) in the FOF accounts as non-financial corporations may be examined depending upon the availability of data.
- The Working Group recommends examining the inclusion of the Micro Finance Institutions (MFIs) established under the Society Registration Act, 1860, Indian Trusts Act, 1882, Self Help Co-operative Act, and Multi State Co-operative Societies Act, in the FOF accounts under the sector 'other financial intermediaries except insurance corporations and pension funds'.

It should be noted that the projections tend to be less reliable in the absence of basic data. Though NABARD has been in constant dialogue with NAFSCOB and NCARDB and obtains data from them time lag issue remains as the data available with them also has a lag. For example, now the data set available with them is for 2014-15 only. Data for PACS is another issue for which sampling method is suggested which has to be tested and validated.

There cannot be second opinion about the suggestion to make FoF more inclusive by covering MFIs, WUAs and FPOs. Data from MFIs can be obtained from the returns submitted by them and/or from their apex bodies like Sa-Dhan which has 180 members. Data on WUAs has to be obtained from RCS with who they must have registered. Again, the same problems that we have listed will be faced. Data on FPOs is not very easy as there is no coordinating agency at state or national level. But to the extent they are registered under Companies Act, Ministry of Corporate Affairs (MCA) would have information. Wherever NABARD or its subsidiaries have promoted or financed, the information can be obtained.

## **7. Summary and Conclusions**

The timely data availability is a major issue. NABARD obtains data through Registrar of Cooperative Societies (RCS) and regular receipt of data from many states remains an issue. To the extent the audit of cooperatives is delayed, the audited data availability is

impaired. Supply of data for cooperatives for FoF accounts has administrative, methodological and technological issues. This paper details a few of them.

The data availability in future is likely to improve with bringing of all DCCBs on to Core Banking Solutions (CBS) platform and launching of a portal by NABARD for online submission of returns by the client institutions. Also, the proposal in recent Budget to link 63000 PACS to CBS of DCCBs is likely to address the delayed data flow issue. The long term structure is an important area to be addressed adequately. The data regarding non-credit societies, which again flows through RCS, is going to be a problem further till we make serious overhauling of the data generation and flow system.

While the data regarding Micro Financing Institutions (MFI) has improved and can be sourced from Sa-Dhan and RBI. Compiling data on Water Users Associations (WUA) is going to be a problem as such data is not compiled by any agency. To the extent they are registered under Societies Act, RCS can be a source. Since NABARD is involved in promoting Farmers Producers Organisations (FPOs), compiling their data can be put on agenda. Wherever they have been registered under Companies Act, Ministry of Corporate Affairs (MCS) can be the source of data.

While computerization of cooperatives and state cooperative departments and office of RCS would ease the data flow and make it timely, the real improvement should come in the understanding of various partners on the importance of the data they generate and report to the macro-economic system. Sensitisation of various partners and impressing on the role the data they supply in policy analysis and formulation remains the key.

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**Annexure****List of Cooperative Institutions/ Federations and their Functions\***

<b>Federation</b>	<b>Year of inception</b>	<b>Purpose/functions</b>
National Federation of State Cooperative Banks Limited (NAFSCOB) www.nafscob.org	1964	<ul style="list-style-type: none"> <li>• Provide a common forum to the member banks</li> <li>• Promote and protect the interests of the member banks &amp; to give expression to members' issue</li> <li>• Co-ordinate and liaison with GoI, RBI, NABARD, State govts, etc</li> <li>• Provide research and consultancy inputs to the member banks</li> <li>• Organise conferences/seminars/work-shops/meeting</li> <li>• Data on StCB, DCCBs, PACS – latest 2014-15 available in pdf form</li> </ul>
<b>National Cooperative Agriculture &amp; Rural Development Banks' Federation Ltd (NCARDB)</b> www.nafcard.org	1960	<ul style="list-style-type: none"> <li>• Promote interests of all its members to attain their organizational objectives and business goals to promote mutual understanding amongst members by providing a common forum for discussing technical and practical problems relating to their business operations and to devise ways and means for solving such problems, based on self-help and mutual aid in accordance with co-operative principles.</li> <li>• Publishes Annual Statistical Bulletin latest for 2014-15.</li> </ul>
<b>National Agricultural Cooperative Marketing Federation of India Ltd.(NAFED)</b> www.nafed-india.com	1958	<ul style="list-style-type: none"> <li>• Promote Co-operative marketing of Agricultural Produce to benefit the farmers. Agricultural farmers are the main members of Nafed, who have the authority to say in the form of members of the General Body in the working of Nafed.</li> </ul>
National Federation of Cooperative Sugar Factories Limited (NFSCF) www.coopsugar.org	1960	<ul style="list-style-type: none"> <li>• To protect and foster the collective interest of cooperative sugar factories for their continued growth and progress through Project Management, Engineering, Sugarcane management, Up-gradation, Financial Management, Manpower Management, Liaison with Central Government and other agencies etc.</li> <li>• To achieve economic betterment of cane growers in India</li> </ul>
National Cooperative Dairy Federation of India (NCDFI), Anand(Gujarat) www.indiadairy.coop	1970	<ul style="list-style-type: none"> <li>• To develop dairy coop in the country. There are 177 milk unions covering 1.4 lakh village level societies.</li> <li>• E-market is the latest innovation</li> </ul>
Indian Farmers' Fertilisers Cooperative Ltd (IFFCO) www.iffco.in	1967	<ul style="list-style-type: none"> <li>• Engaged in production and marketing of fertilisers.</li> <li>• Has over 36000 members</li> </ul>

National Cooperative Housing Federation Ltd (NCHF) www.nchfindia.net	1969	<ul style="list-style-type: none"> <li>• Promote develop and coordinate activities of housing cooperative societies</li> <li>• Has 26 state coop housing finance federations and 1,00,000 housing societies</li> </ul>
National Coop Consumers' Federation of India Ltd (NCCF) nccf-india.com	1965	<ul style="list-style-type: none"> <li>• Works as spokesperson for consumer coop movement</li> <li>• 144 primary and wholesale societies</li> </ul>
All India Federation of Cooperative Spinning Mills Ltd (AIFCSM)	1964	<ul style="list-style-type: none"> <li>• Consultant to 159 coop spinning mills</li> <li>• set up 112 of them and helps marketing</li> </ul>
National Labour Cooperatives Federation of India Ltd (NLFC) www.labcofed.org	1981	<ul style="list-style-type: none"> <li>• To Organize, promote and develop labour cooperatives, their district and/ state level unions/federations</li> <li>• 365 societies/federations under NLFC</li> <li>• 44000 labour coop societies</li> </ul>
National Federation of Fisheries Cooperatives Ltd. (Fishcopfed) www.fishcopfed.in		<ul style="list-style-type: none"> <li>• Has 18 state level federations, 108 Central level federations, 130000 fishermen societies</li> <li>• Engaged in augmenting production, processing, storage, transport capacity of the fisheries sector</li> </ul>
National Cooperative Development Corporation (NCDC)	1963	<ul style="list-style-type: none"> <li>• Planning, promoting and financing programmes for production, processing, marketing, storage, export and import of agricultural produce, food stuffs, certain other notified commodities e.g. fertilisers, insecticides, agricultural machinery, lac, soap, kerosene oil, textile, rubber etc., supply of consumer goods and collection, processing, marketing, storage and export of minor forest produce through cooperatives, besides income generating stream of activities such as poultry, dairy, fishery, sericulture, handloom etc.</li> </ul>
Tribal Cooperative Marketing Development Federation of India (TRIFED) www.trifed.in	1987	<ul style="list-style-type: none"> <li>• Marketing development of tribal products and handicrafts</li> <li>• 7 state TRIFEDs and a number of LAMPS</li> </ul>
National Cooperative Union of India (NCUI) www.ncui.coop	1929	<ul style="list-style-type: none"> <li>• to educate, guide and assist member organizations in strengthening the cooperative sector.</li> <li>• 243 coop organisations as members</li> </ul>
Irrigation cooperatives		<ul style="list-style-type: none"> <li>• 15716 irrigation societies</li> </ul>
Women cooperatives		<ul style="list-style-type: none"> <li>• 12469 women cooperatives</li> </ul>
Transport cooperatives		<ul style="list-style-type: none"> <li>• 8122 transport cooperatives</li> </ul>

\* The list is not exhaustive.