55 Recommendations of TARC Fourth Report- Acceptable or Acceptable with modification – Under Implementation (CBDT)		
Chapter	**Observation/Recommendation of TARC**	**Comments**
XIII	**Revenue Forecasting**	
	i) **Approaches to revenue forecasting**	
1	a) It is important that the budget forecasting processes are balanced, transparent, and trusted. (Section XIII.5.a)	**Under Implementation**
2	b) It is also important that the revenue forecasting process involves expertise and experience, so that its dynamic character is properly harnessed, to understand far-reaching policy implications. (Section XIII.5.a)	**Under Implementation**
3	c) The revenue forecasting process should observe three key elements – transparency, formality and organisational simplicity.(Section XIII.5.a)	**Under Implementation**
4	d) All macroeconomic assumptions or other assumptions in the forecasts should be properly explained and made public to ensure transparency. Such detailed information in the public domain will have the salutary effect of improving data quality and accountability in the tax forecasting process. This should result in increased accuracy, and possibly a reduction in ad hoc or discretionary adjustments during the fiscal year. Transparency will also enhance the credibility of the forecasts, which so far has been sadly missing. (Section XIII.5.a)	**Under Implementation**
5	e) Budget preparation practices in the TPL and TRU are to a large extent unstructured and the existence of formal rules on issues, such as forecasting responsibilities, time table and documentation, will establish a well-structured process leading to more timely forecasts and will reduce the scope for covert interference. (Section XIII.5.a)	**Under Implementation**
6	f) There is need for organisational simplicity, so that there is coherence in the result with less time spent on sparring over each competing model and more on improving forecast results,based on detailing the model itself. (Section XIII.5.a)	**Under Implementation**
	ii) **Revenue forecasting methods**	
7	g) Tax revenue forecasting has many models with a separate model for each tax type. There is no commonly accepted, standard practice or model for revenue forecasts. Tax administrations	**Under Implementation**

	generally draw upon a combination of models, consumer and business surveys and expert opinions to arrive at tax forecasts and analysis. Both the Boards should also adopt a bouquet of methods and not rely on only one method. (Section XIII.5.a)	
8	h) The two Boards should maintain the two forecasting systems – the first one focusing on the short-term forecasting horizon (say, up to six months), and the second focusing on longer time horizons (greater than six months). (Section XIII.5.a)	**Under Implementation**
	iii) **Tax debt collection**	
9	q) Cluster analysis, based on characteristics, such as tax debt size, taxpayer status, underpaid tax, etc., can be employed as one of the methods. The characteristics of taxpayers in a cluster will require risk assignment on the basis of inputs from field formations as well as on the basis of data or information from the data warehouse to tailor taxpayer treatments on the basis of individual circumstances and behaviour. (Section XIII.5.a)	**Under Implementation**
10	r) It will be useful to carry out the tax debt analysis using combined data with the CBDT and CBEC. This will be in line with the TARC recommendation in Chapter IX of "one data, many users". The combined data based on common standards and taxonomy will facilitate data exchange between the two Boards, enabling better data analysis to track the taxpayer's tax liabilities, payments and balances using the basic data in one system. (Section XIII.5.a)	**Under Implementation**
11	s) The combined data can be structured to form a data layer that contains every tax debt and tax debtor, making it possible to follow them throughout the collection lifecycle in a united manner, as ultimately there is only one taxpayer. This chain of collection can identify where the tax debtor is in the chain at a certain time. Such a system to monitor the development of each tax debt, whether in the CBDT or the CBEC, will improve the overall tax collection process. (Section XIII.5.a)	**Under Implementation**
	iv) **Reviewing and reporting of forecasts and monitoring of taxes**	
12	t) It is important that tax forecasts are revisited on a regular basis as key economic variables, such as the gross domestic product, inflation, short- and long-term interest rates, employment growth, etc., are changing constantly, and that may affect forecast results. Due to change in economic indicators, there are chances that the structural relationship(s) may also change. (Section XIII.5.b)	**Under Implementation**

13	u) It is important that tax collections are monitored and reviewed to enhance the accuracy of the forecast. This may involve a series of consultations with the macroeconomists in the economic division of the Department of Economic Affairs to understand changing economic indicators as they affect tax collections. These consultations will also help the CBDT and CBEC to assess whether the tax forecast will require to be revisited, and may help in preparing an assessment on whether the budget estimates are likely to be met or will require reduction. (Section XIII.5.b)	**Under Implementation**
14	v) The forecast process needs to be made more transparent. It is recommended, therefore, that a small unit, comprising TPL and TRU officials and officers from the economic division of the Department of Economic Affairs and the Reserve Bank of India, be set up within the TARC recommended Tax Policy and Analysis unit with a mandate to evaluate and prepare a report on the tax implications of macroeconomic changes. The report can be presented to the Parliament as part of the FRBM Act. These reviews can be done twice in a fiscal year, one after 6 months of the start of the fiscal year and another after 10 months. (Section XIII.5.b)	**Under Implementation**
	v) **Data requirements**	
15	w) Data availability can impose constraints on the revenue forecasting process. The two Boards must develop a clear strategy to systematically clean the taxpayer master file and tax returns database. This activity may be beyond the scope of work of the existing TPL and TRU. However, inputs from them will be invaluable from the user's perspective since they have dealt extensively with cleaning up the taxpayer data. (Section XIII.5.c)	**Under Implementation**
16	x) Once the data is available, it can be examined for underlying pattern, rates of change, or trends, by making comparisons of data from different sources, linking data sets, comparing corresponding items, finding relationship and patterns, and constructing descriptive or hypothetical representational and/or functional relationships between the different variables of which the data is composed. (Section XIII.5.c)	**Under Implementation**
17	y) After projections have been made, the estimates need to be evaluated for their reliability and validity. To evaluate the validity of the estimates, the assumptions associated with the revenue source need to be re-examined. If the assumptions associated with the existing economic, administrative, and political environment are sound, the projections can be assumed to be valid.	**Under Implementation**

	(Section XIII.5.c)	
18	z) Reliability can be assessed by conducting a sensitivity analysis. This involves varying key parameters used to create the estimates. If large changes in the estimates result, the projection is assumed to have a low degree of reliability. (Section XIII.5.c)	**Under Implementation**
19	aa) The TPL and TRU must be sufficiently equipped with computer hardware, database systems, and other office software including the most recent econometric and statistics software packages. These equipment and software systems are necessary to conduct the most demanding data analysis. (Section XIII.5.a)	**Under Implementation**
20	bb) The TPL and TRU should also have access to current, seminal publications on tax and fiscal research and a database of journal articles for the continuous upgrading of the skills and knowledge of the officers working there. (Section XIII.5.a)	**Under Implementation**
	vi) **Partnering non-government bodies and research institutions**	
21	cc) Maintaining a regular dialogue with academia and business communities is valuable for identifying emerging trends in the economy. For these interactions, the academia and business communities must be provided data, albeit encrypted data, so that they have the requisite data for a more meaningful engagement. The CBDT and CBEC, for the purpose, should identify academic institutions of national repute and business or professional associations having all- India membership that can collaborate for the dialogue. (Section XIII.5.d)	**Under Implementation**
	vii) **Integrating revenue forecasting with policy**	
22	dd) It is important to integrate tax forecasting results, particularly relating to tax analysis such as distributional impact out of the micro-simulation model or tariff impact on commodities from the trade tax calculator, to estimate how much each tax policy will cost taxpayers and the tax that it will raise. This can be used as a tool to inform decision makers, including ministers, of the likely benefits and costs, identifying key factors that should affect the decision, strengthening the quality of analysis and making the policy inclusive. (Section XIII.5.e)	**Under Implementation**
	viii) **Organisational/institutional arrangements**	
23	ee) In line with the recommendation in Chapter III of the TARC report, it is reiterated that the existing TPL and TRU wings of the CBEC and CBDT should be subsumed in the TPA wing. The	**Under Implementation**

		TPA wing should be expanded to include specialists, such as economists, tax law experts, statisticians, operations researchers and social researchers to form a multidisciplinary team. (Section XIII.5.f)	
24		ff) An important task of this unit will be to publish results from the analytical models it develops. These publications should contain objective and impartial analyses and should be helpful in guiding broad policy debates, so that the knowledge can be shared with peers and the policy community for discussion and feedback. (Section XIII.5.f)	**Under Implementation**
		ix) **Staff resources**	
25		hh) The officers and staff of the TPL and TRU need to be selected on the basis of specified qualifications. The officers and staff of the TPL and TRU should include trained personnel with specialised skills and knowledge in the fields of revenue forecasting, analysis and monitoring. (Section XIII.5.g)	**Under Implementation**
26		ii) IRS officers at the levels of Joint Secretary and Director in the TPL and TRU should have wide knowledge of tax policy and macroeconomic issues and deep understanding of revenue estimation and forecasting. (Section XIII.5.g)	**Under Implementation**
27		jj) For officers below the level of Joint Secretary and Director, knowledge and skill to gather data from different agencies, perform routine analytics for forecasting revenue, and prepare results that could be used for drafting tax memoranda will be useful. These officers and staff can be from the disciplines of statistics, economics, and social science. Duties of these personnel will be to conduct macroeconomic analysis for revenue and tax debt forecasting, monitoring, and analysing tax receipts on a regular basis, and to evaluate the economic and revenue impact of introducing new and/or maintaining existing tax policies on the tax base and tax revenues. (Section XIII.5.g)	**Under Implementation**
28		kk) Officers below the level of Joint Secretary and Director need to have some knowledge of taxation policies, and direct and indirect tax laws, knowledge of technical report writing, and skills in handling computer databases and statistical packages, and econometrics software, such as SAS, EViews, STATA, etc. (Section XIII.5.g)	**Under Implementation**
29		ll) On-the-job training should be considered the most important route to developing and deepening the necessary skills required to perform such functions. A university-level education in	**Under Implementation**

	economics, public policy, statistics and other related disciplines should be considered necessary. Actual strengthening of their capacity can be attained through regular internal seminars, workshops and specialised short courses. (Section XIII.5.g)	
30	mm) These capacity building exercises, particularly internal seminars and workshops will have to be organised on a monthly or quarterly basis so that officers and staff get adequate opportunity to present his/her work on a particular issue to the rest of the unit. (Section XIII.5.g)	**Under Implementation**
31	nn) Customised and specialised short courses on revenue forecasting can also be organised for staff and officers of the TPL and TRU so that they gain up-to-date knowledge on the subject, and are aware of new developments. These courses should invariably be graded to ensure that the learning is imbibed and can be immediately utilised in the work. Long-term training can also be considered on the subject for the long-run viability of the analytic unit of the TPL and TRU. (Section XIII.5.g)	**Under Implementation**
XIV	**Predictive Analysis**	
	i) Increasing data pool for analytics	
32	b) With regard to third party data, the "silo" approach should be avoided and the "one data many users" principle must be adopted as recommended in Chapter IX of the TARC's report. (Section XIV.5.a)	**Under Implementation**
33	c) To enable reliable predictive analysis, the offence data base needs to be made robust, reliable and shared. Besides data sharing, there should also be proper data publication. As is the case with several countries, there is also a need to publish consolidated watch lists such as lists of tax defaulters, international fugitives and known offenders. (Section XIV.5.a)	**Under Implementation**
34	g) An important responsibility of the CIO will be to expand the data pool for analytics by continuous scan of the environment for identifying new and emerging sources of data and securing data access from them, in line with recommendations in Chapter IX of the TARC report. (Section XIV.5.a)	**Under Implementation**
	v) Training	

35	t) This should include the top and middle-level management who must be imparted broad knowledge of analytics and its potential. (Section XIV.5.b.v)	**Under Implementation**
36	u) A well designed course on ICT and analytics should be made a part of IRS officers' induction training in the two academies. (Section XIV.5.b.v)	**Under Implementation**
XV	**Research for Tax Governance**	
	i) Role of research in improving tax governance	
37	d) The Indian tax administration is attempting to enhance delivery. Research in tax governance, with a multi-disciplinary approach involving disciplines such as economics, accounting, finance, law, management, behavioural science, ICT, and statistics, can help review current practices and design new approaches to expand the tax base and increase tax revenue, while remaining cognizant of the government's aim to promote economic development and tax justice. (Section XV.1)	**Under Implementation**
38	e) Research needs to be evidence-based and needs to be meticulously designed, implemented, and executed so that the output is relevant to and usable to the tax administration. This will require an organisational framework, finance, staff, the development of linkages for collaboration – internal-governmental mechanism or with outside agencies – and the building of skills needed to evaluate outputs to assess their practical utility. (Section XV.1)	**Under Implementation**
39	f) Research cannot be a one-off exercise; it has to be embedded in the tax administration so that there is two-way movement, top-down as well as bottom-up, within the various tax departments to build an ecosystem to undertake meaningful research. (Section XV.1)	**Under Implementation**
	ii) Areas of research	
40	g) Important areas of research, only indicative by enumeration and by no means exhaustive, can be as follows: • Compliance tracking • Identifying the rich and wealthy • Measuring voluntary compliance • Identifying audit/scrutiny risk elements • Impact analysis	**Under Implementation**

	- Taxpayer surveys - Trade and customs - Taxing hard-to-tax sectors - Tax effects on investment - Tax incentives for R & D - Taxing natural resources - Taxation of the insurance sector - Performance management - Technology scan in SPV/DG (Systems) - Fairness in tax disputes - Corruption in tax administration (Section XV.4.a)		
41	h) Some of the research work can be carried out jointly by the CBDT and CBEC. (Section XV.4.a)	**Under Implementation**	
	iii) External research collaboration		
42	i) Research work, on short-term or long-term basis, can be carried out by external research organisations. This will be in addition to in-house research on topics that need to be worked on only within the tax administration. (Section XV.4.b)	**Under Implementation**	
43	j) The CBDT and CBEC will have to put in place an arrangement for partnering with external research organisations on a long-term basis for research and analysis on topics requiring external assistance. (Section XV.4.b)	**Under Implementation**	
44	n) The expectations of the tax administration on the deliverables by external research organisations will have to be clearly spelt out and communicated so that they are not misunderstood. (Section XV.4.b)	**Under Implementation**	
45	o) Research collaboration should be demand-driven and there should be clear organisational intent on the part of the tax administration to requisition the research input, with full ownership of the demand. (Section XV.4.b)	**Under Implementation**	
46	p) It is also important that research collaborations are made not only with reputed national organisations, like NIPFP, NCAER, NIFM, ICRIER, etc but are made broad-based to include	**Under Implementation**	

	other regional institutes so that there is a larger pool of research institutes available for collaboration. Although geographical distribution cannot be the sole basis for enlarging the base, it needs to be taken into account to ensure that the capacity of these institutes also get upgraded over a period of time. (Section XV.4.b)	
47	q) The tax administration should consider engaging external research organisations for taxpayer surveys, evaluation of the effectiveness of the tax administration's policies, suggestions on ways to improve policy and administration and identifying lessons learnt. Apart from the fact that such research requires large manpower and are time-consuming, these are also areas in which the tax administration does not have any expertise. (Section XV.4.b)	**Under Implementation**
	iv) Dissemination of research	
48	r) Dissemination of research and the associated knowledge management can play an important role in building intellectual capital to improve the effectiveness of the tax administration. (Section XV.4.c)	**Under Implementation**
49	s) As part of research dissemination, the TPA (Tax Policy and Analysis) unit can bring out annual or biannual reports on revenue trends and forecasts and monthly supplements to such forecasts; the KAI centre could do the same on the operational needs of the tax departments. (Section XV.4.c)	**Under Implementation**
50	t) The TPA unit and KAI centre, along with NADT and NACEN, can also conduct seminars and conferences and bring out reports on the deliberations in those seminars. These conferences and seminars will provide officers an opportunity to interact with tax experts from the private sector and academia. (Section XV.4.c)	**Under Implementation**
	v) Human resources for research	
51	u) In line with the recommendations in Chapter III of the TARC report, both TPA and KAI centre should undertake high level research. People posted in these units need to have highly developed skills in data handling and carrying out detailed analysis. Research work undertaken needs to adopt a multi-disciplinary approach. (Section XV.4.d)	**Under Implementation**
52	v) People working and involved in research in the TPA and KAI centre should have university level education in the field of economics, psychology, statistics, management, or law, with	**Under Implementation**

	adequate experience in public policy formulation. But this in no way suggests that those with other educational backgrounds cannot work in the TPA and KAI. (Section XV.4.d)	
53	y) There should be intense training, either in-house at NADT or NACEN or at reputed research institutions, of officers involved in research. They should be trained on research methodologies, and be given practical training on data analysis. (Section XV.4.d)	**Under Implementation**
	vi) Allocation of funds for research	
54	cc) To give adequate emphasis and focus to research in tax administration, sufficient funds should be provided in the budget under a separate head. To sustain the focus and to establish continuity no re-appropriation of funds should be allowed from this head of research. (Section XV.4.e)	**Under Implementation**
55	dd) Participation in technical seminars and events in specialised areas will also add to the knowledge base of officers. Officers can be considered to be deputed to attend research seminars or courses, whether in India or abroad. Adequate funds will need to be allocated for this purpose to ensure that it is done on a regular basis. (Section XV.4.e)	**Under Implementation**