PERSPECTIVE PLAN for INDIAN FORENSICS

Final Report

presented to the

Ministry of Home Affairs

Government of India

New Delhi

by the Consultants

Dr. Gopal Ji Misra & Dr. C. Damodaran

CONTENT

		Page
List of al	obreviations	xii
Executiv	e Summary	1
1	Introduction	70
2	Organization	87
3	Infrastructure	143
4	Procedures	163
5	Research	189
6	Training	199
7	Education	210
8	Homeland security	229
9	Miscellaneous	233
Impleme	entation Plan	276
Acknowl	edgement	281
Reference	ces	282

EXECUTIVE SUMMARY

Initiative

A landmark shined in Indian forensics when the Hon'ble Minister for Home Affairs, Government of India declared the year 2010 as the Year of Forensic Science. In close pursuit, the Secretary to Government, Ministry of Home Affairs (MHA), Government of India (GoI) spoke over phone [Ref 1] and the Special Secretary sent inviting letter in mid – January 2010 so as to engage us both (Dr. Gopal Ji Misra and Dr. C. Damodaran) as Consultants to carve out Perspective Plan for Indian Forensics in a six months – time – bound mission – mode [Ref 2]. Salient features for the study were indicated as:-

- Organizational structure
- Strategy for development
- Plan for the future of forensics
- Personnel policy
- Human resource development
- Technology & manpower gaps
- PG Diploma and M.Sc. Courses in forensic science

- Emerging key areas
- Accreditation of forensic laboratories
- Other related issues.

Subsequently an e-mail letter from MHA in Feb 2010 gave a detailed version of the Terms of Reference for the exercise highlighting tasks pertaining to:

- (A) Infrastructure
- (B) Procedures and processes
- (C) NICFS and forensic academia
- (D) Organization
- (E) Miscellaneous.

There was also mention of the anticipated output, providing strategy and action plan, in the form of an interim report (within April 30, 2010) followed by the Final Report (within July 31, 2010) [Ref 3]. Besides, on Feb 8, 2010 the Consultants had the privilege of listening for quite long to the Hon'ble Home Minister, Gol who was explicit in his serious concern towards Indian forensics and his pragmatic commitment to refurbishment. He also elaborated on the needs of homeland security, and pointed out issues relating to forensic organization, technology, human resource, training, recruitment & promotion, and mis — match between M.Sc. (Forensic Science) pass outs and placement. The Minister's mandate was that a Perspective Plan for Indian Forensics incorporating action plan bullet points for implementation, primarily at the Central level, should be ready by July 2010 [Ref 4].

Indulgence

Adhering to the concepts of the circumscription, the Consultants (one at Chandigarh and the other at Chennai) embarked on swift action first by creating an e-mail id < pplanfs2010@gmail.com >. This was followed by letter (through postal certificate / fax / e-mail) to the major forensic players of the country including Central, State and Union Territory (UT) forensic establishments, priming them to the upcoming Perspective Plan – preparation [Ref 5]. Simultaneously efforts got underway to review published materials and to design survey – questionnaires which were finalized after the logistics – conscious clustering of both the Consultants (at Chandigarh) effected by the relocation of Dr. Damodaran's establishment from Chennai to Chandigarh.

Assimilation of contemporary data was then set in motion by focussing on 499 addressees representing direct and indirect forensic promoters and beneficiaries, with requests that varied relevantly in script (and the enclosed Questions, Tables etc.) but tallied uniformly in anticipating specific inputs. Letters in hard / soft copy for the purpose were sent to:

- Director cum Chief Forensic Scientist, Directorate of Forensic Science (DFS), MHA, GoI, New Delhi
- Directors of Central Forensic Science Laboratories (CFSLs) under DFS / CBI
- Government Examiners of Questioned Documents (GEQDs) under DFS

- Directors of State / UT Forensic Science Laboratories (FSLs)
- Director, National Institute of Criminology and Forensic Science (NICFS), MHA, GoI, New Delhi
- Head of Neutron Activation Analysis (NAA) Unit (of the CFSL, Hyderabad), Bhabha Atomic Research Centre (BARC), Mumbai
- Head of Forensic Science Wing, SVP National Police Academy, Hyderabad
- Director, Central Finger Print Bureau (CFPB), NCRB, MHA, New Delhi
- Director Generals of Police (States)
- Director General, Bureau of Police Research and Development (BPR & D), MHA, New Delhi
- Director General, National Crime Records Bureau (NCRB),
 MHA, New Delhi
- Director, SVP National Police Academy, Hyderabad
- Registrar General (Supreme Court) and Registrars of High Courts.
- Directors of Police Academies / Principals of Police Training Colleges
- Directors of Judicial Academies
- Directors of Prosecution
- Presidents / Secretaries of Bar Councils

- Presidents / Secretaries of Advocates' Associations
- Retired / senior forensic scientists
- Serologist to Government
- Chiefs of Chemical Examiner's Laboratories
- Forensic Medicine Experts & Police Surgeons
- Chiefs of State Fingerprint Bureaux
- Officers of CBI, NSG, NCB, CISF and ITBP
- Deputy Controllers of Explosives
- Principals of Central Detective Training Schools
- Officers of Defence Services
- Officers of Customs & Excise Service
- Heads of academia [Universities / Colleges / Institutes]
 offering forensic science courses
- Head of Wildlife Institute
- General Managers of Banks

Copies of the communications concerned with enclosures as applicable [Ref 6 - 16] are provided in **Attachments A- K**.

Decades – long experience of the Consultants and response from the above exercise formed the core material for analysis. Other relevant repositories for tapping included: archival and contemporary scientific literature, reports, reviews, internet, interviews, visits and tele interactions [Ref 17 - 138]. Information

and data were then subjected to incisive comprehension, wherever possible with an eye for quantification.

Impressions

Forensic Science, an amalgamation of almost all faculties of knowledge is an essential and efficient enabler in the dispensation of justice in criminal, civil, regulatory and social contexts. Historically our forefathers in India have practised forensic application in variety of forms. Present day Indian forensics, as chronicled, owes its genesis to several British initiated ventures such as Chemical Examiner's Laboratory (Madras, 1849), Anthropometric Bureau (1892), Finger Print Bureau (1897), Inspectorate of Explosives (1898), Office of Government Handwriting Expert (1904), Serology Department (1910), Foot Print Section (1915), Note Forgery Section (1917), Ballistics Laboratory (1930) and Scientific Section (1936) [Ref 57]. Having subsequently undergone clubbing / regrouping / spreading, as of now, there are 28 State / Union Territory Forensic Science Laboratories (State / UT FSLs) along with their Regional FSLs (32 RFSLS) and Mobile FSLs (144 MFSLs); they are mostly with the respective Home Department either directly or through police establishment.

During 1957, the first Central Forensic Science Laboratory (CFSL) was established at Calcutta, followed by the ones at Chandigarh (1961; traceable to Lahore – origin of 1933) and Hyderabad (1965). In 1971, Neutron Activation Analysis (NAA) Unit came into operation at Bhabha Atomic Research Centre (BARC), Mumbai. Thus the Bureau of Police Research &

Development (BPR & D) administered three CFSLs, including NAA, and three laboratories of Government Examiners of Questioned Documents (GEQD). Presently (since 2002 / 03) they are all under the Directorate of Forensic Science (DFS; MHA, GoI); CFSL, Hyderabad has in its fold the NAA Unit and GEQD, Shimla has a branch at Chandigarh [Ref 42] (Figure 1).

7. EDUCATION

7.1. Prelude

Metaphysics, the theoretical philosophy of being and knowing, has over time been experimented upon and supplemented by supporting data. Learning or gaining knowledge and skill has then become more logical thereby making education possible as a formal and prolonged process to give intellectual instruction for particular purpose. Forensic Science is a composite of multiple disciplines with their inherent basics, unique techniques and varied interpretations; hence forensic practice is comparable to operating a multipronged multifunctional tool. Dynamic advancements in Science and Technology alter / add to the shape and shine of the prongs. Education in modern forensics began as part of Chemistry at University of Strathclyde (UK) and has spread across continents.

In India, during 1959, Sagar University (Madhya Pradesh) pioneeringly started education in forensic science and criminology. Since then forensic education has grown almost exponentially to the extent that private stakeholders are also in the arena. Forensic profession for justice administration in India has been entirely in public governmental sector; of late private organizations are entering the field. Besides there is increase in volume of crimes, variety of

crimes and intricacy of crimes; alongside judiciary, police, media and general public are better aware of forensics. The writing on the wall is that there is demand for forensic practitioners and there is supply of forensic science pass outs. In extrapolation there is an urgent need for ensuring quality of professionals and quality of education.

7.2. Focus

The 1959 – debut in forensic education by Sagar University was followed by Punjabi University, Patiala in offering MSc (Forensic Science) programme from the academic year 1974 – 75. Then in the line was the (Government of Tamil Nadu) Forensic Science Laboratory that assumed the global distinction as the only serving government laboratory to have University affiliation and conduct two - year full time MSc (Forensic Science) Course of the University of Madras from 1976 – 77; Ph D programme was offered from October 1981. The present picture is that of variety and fancy. As given representatively in Table 8, there are as of now numerous public funded / government aided / non – governmental Universities, institutions and colleges in India that conduct (full time / part time / distance mode / on – line) Certificate, Diploma, PG Diploma, Degree and Postgraduate courses and Doctoral programmes in forensic science and its sub – disciplines.

 Table 8: Bird's – eye view of capricious forensic education in India

S. No.	University / Institution	Certificate, diploma or degree offered (FT / PT / DM / OL)	Number of seats
1	Amity University Noida	(d) B.Sc.(H) (FS) - FT (e) M.Sc. (FS) - FT (f) Ph.D. (FS) - FT	NI NI NI
2	Asian School of Cyber Law Pune	Certificate (CC) - OL	NI
3	Bundelkhand University Jhansi	(d) PG Diploma (FS) - FT (e) B.Sc.(H) (FS) - FT (f) M.Sc. (FS) - FT	40 60 40
4	Department of Anthropology University of Delhi Delhi	Certificate (FS) - FT	NI
5	Dr. B. R. Ambedkar University Agra	M.Sc. (FS) - <i>FT</i>	15
6	Dr. H.S. Gour Vishwavidhyalaya Sagar	(c) B.Sc. (FS) - FT (d) M.Sc. (FS) - FT	10 18
7	IFO Forensic Standards and Research Delhi	Seven certificate courses (FS) - DM	NI
8	Intense Forensic Services India Pune	Eleven courses - OL	NI
9	Kurukshetra University Kurukshetra	M.Sc. (FS) - <i>FT</i>	20+ 5(additional)

Contd.

Table 8: Bird's – eye view of capricious forensic education in India (*Contd.*)

10	Maharashtra Govt. Institute of Forensic Science Aurangabad	(c) PG Diploma (FS) - FT (d) B.Sc. (FS) - FT	40 50
11	NICFS (affiliated to Guru Gobind Singh Indra Prastha University, Delhi) Delhi	 (f) Induction, refresher and awareness courses - FT (g) Certificate - FT (h) Diploma - FT (i) PG Diploma - FT (j) M.Sc. (FS) - FT 	NI NI NI NI 26
12	Osmania University Hyderabad	M.Sc. (FS) - <i>FT</i>	NI
13	Panjab University Chandigarh	(c) M. Sc. (FS) - FT (d) Ph. D. (FS) - FT	NI NI
14	Punjabi University Patiala	(c) PG Diploma (FS) - <i>DM</i> (d) M.Sc. (FS) - <i>FT</i>	100 (in-service personnel) 16
15	Sam Higginbottom Institute of Agriculture, Technology & Science Allahabad	(e) Diploma (DOC / FP) - FT (f) B.Sc. (FS) - FT (g) M. Sc. (FS) - FT (h) Ph.D. (FS) - FT/PT	NI NI NI NI

FT: Full time PT: Part time DM: Distance mode OL: On – line PT: Honours Degree PT: For ensit Science PT: Not indicated PT: CC: Cyber crime

DOC : Documents FP : Finger print

Interestingly GoI — MHA's NICFS, primarily meant to train forensic entrant recruits and in service personnel (through a plethora of regular short term and long term programmes) and instill forensic awareness in judiciary, prosecution and police (through days

- long sessions), has chosen (since 2004-05) to run full time two year MSc (Forensic Science) Course of GGSIP University, Delhi. There is no doubt that NICFS has good infrastructure; but a major problem lies in the meagre faculty strength (two) (Table 52) whose knowledge - time / efforts are to be shared between the MSc (FS) programme and their mainstream training programmes. In fact all the 100% availability of the two faculty by itself is not sufficient even for the mandated training programmes; while being so, further damage has been made by the new add on namely MSc (FS) Course, resulting in slow and steady disappearance of the training component (Table 7). Therefore while appreciating the regulations and syllabi of NICFS's MSc Course, it is to be decided that this course be kept in abeyance right away and the required thrust be reinstated for the training part. Views of Central forensic establishments as given in Table 53 also reflect this. It should also be in its further interest if the institute is devoid of Criminology and renamed as National Forensic Academy (NFA) in the lines of National Judicial Academy and National Police Academy.

Table 52: Current facilities at National Institute of Criminology and Forensic Science (NICFS) for conducting M.Sc. / M.A. Courses

			F NAC-		E NA			
S.No.		Feature	For M.Sc.	. \	For M.A. / M.Sc.			
			(Forensic Science		(Criminology)			
			Addl. Director	- 01		01		
	Full tir	ne permanent	M.Sc. (Chem.), Ph.D. (M.A., LL.M.				
1		Ity to teach						
	rucu	ity to todoii	Senior Scientific Assista	ant - 01				
		,	B.Sc., AIC (equivalent	to M.Sc.)				
2	Library	Books	Sufficient		Sufficient			
	Library Journals		06		39			
			Presented in national of	conf 03				
			Case report	- 01				
3	Pι	ıblication			Not known			
			Review	- 01				
			Total (2005-2009)	- 05				
			-		-			
4	Acco	mmodation	15 double bed rooms with attached rest rooms and					
			combined kitchen facilities at the hostel in the premises					
5	Eq	uipments	Good		Not known			
6	Sc	holarship	Governed by GGSIP U	niversity	Not known			
		noidi si np	rules		TWO CRITOWIT			
7	Disciplinary action		As per GGSIP Univers	ity rules	Not known			
8		rformance	Regular internal asset		Not known			
	e\	/aluation	and, Final by exte	rnal	Not known			

M.Sc.: Master of Science; M.A.: Master of Arts; Ph.D: Doctor of Philosophy;

B.Sc. : Bachelor of Science; AIC : Associate of Institution of Chemists; LL.M. : Master of Laws

GGSIP: Guru Gobind Singh Indra Prastha University, New Delhi

♠ While the Syllabus and Regulations are understandably the same, B.Sc. holders passing this course are awarded M.Sc. (Criminology) Degree whereas B.A. holders passing this course are awarded M.A. (Criminology).

Table 7: Activity grid of NICFS, Vide Calendars of courses for 2009 and 2010-2011

	Courses / workshops / seminars /	Forensi		i ce (in wo	orking	Crimino	Criminology (in working days)			
	certificate,	2009		2010-2011		2009		2010-2011		
Diploma and M.A. /	M.Sc.(Crim.),	No. of courses etc.	No. of days	No. of courses etc.	No. of days	No. of courses etc.	No. of days	No. of courses etc.	No. of days	
1	Advance, latest techniques, refreshers, orientation courses	13	107	06	26	13	65	16	66	
2	Certificate courses	07	Each of 60	-	-	-	-			
3	Foundation courses	01	60	-	-	-	-			
4	Diploma courses	01	365	-	-					
5	PG Diploma course	04	03 of 365 01 of 552	-	-					
6	Workshop	-	-	09	32			_		
7	Seminars	-	-	02	06	_		01	03	
8	M.Sc. (FS)	01	365	01	365	_	-	-	-	
9	M.A. / M.Sc. (Crim.)	-	-	-	-	01	365	01	365	

 Table 53 : Role of NICFS, as viewed by Central forensic establishments

S. No.	S. No. Laboratory		Refresher training to serving scientists	Awareness training to forensic	Conduc M. (Forensic Cou	Sc. Science)	Forensic Some Criminal faculties s	Become modern training institute in	
		recruits	(contg. edn.)	end - users	Continue	Suspend	Separate	Remain together	forensic science
1	CFSL, Chandigarh	V	√	V	-		V	-	V
2	CFSL, Hyderabad	V	√	√	-	$\sqrt{}$	V	-	V
3	CFSL, Kolkata		$\sqrt{}$	$\sqrt{}$	-			-	$\sqrt{}$
4	CFSL, CBI, New Delhi	$\sqrt{}$	$\sqrt{}$	V	-		$\sqrt{}$	-	$\sqrt{}$
5	NAA, BARC, Mumbai	ı	ı	$\sqrt{}$	-	ı	-	ı	$\sqrt{}$
6	GEQD, Hyderabad	-	-	V	-	-	-	-	-
7	GEQD, Kolkata	-	-		-	-	-	-	_
8	GEQD, Shimla				-			-	-

Nevertheless as given in Table 54, forensic science education is popular with some identifiable scope for placement; role – modal scientists in the field, crime scene investigation etc episodes in media, attractive advertisements and availability of admission are some of the reasons attributable to the popularity. As assessable through survey in the present study and through other sources, it is apparent that full time equivalent faculty strength to handle MSc (FS) Course is not adequate in majority of the academia (Table 55). Also there is no uniformity in the regulations, syllabi and dispensation of the programme (Table 56). Course curricula of the Indian forensic educational variety appear *prima facie* on par with professional needs and international standards; however the more serious issues of faculty, infrastructure, teaching technology, practical sessions, forensic exposure, and evaluation system need to be looked into a bit closer. This prompts a statutory regulation.

Table 54: Popularity of forensic science education in India and scope of M.Sc. (FS) pass outs, as viewed by Central forensic establishments

		Popular	ity of forensic be at	science degre	e courses can	Scope of M.Sc. (FS) pass outs				
S.No.	Laboratory	Scientists of the field	Crime scene investigating series in media	Attractive advertisements	Admission availability	Chances to get job in Forensic Science Lab in comparison to core science pass outs	Self employment as private expert	Chance of getting job increases if more FSLs are established	Can seek employment as lecturer in forensic teaching institute / university	
1	CFSL, Chandigarh	$\sqrt{}$	V	V		Equal chances			√	
2	CFSL, Hyderabad	$\sqrt{}$	V	V	V	Equal chances	V	V	√	
3	CFSL, Kolkata		√	√	√	Equal chances	√	√	√	
4	CFSL, CBI, New Delhi		√	V	-	Equal chances	-	V	√	
5	NAA, BARC, Mumbai	-	√	-	-	Equal chances	-	-	-	
6	GEQD, Hyderabad	$\sqrt{}$	-	-		Equal chances	-		-	
7	GEQD, Kolkata	$\sqrt{}$	V	-	-	-	$\sqrt{}$	V	V	
8	GEQD, Shimla	$\sqrt{}$	-	-		Equal chances	-	V	-	

Table 55: M.Sc. (Forensic Science) Course - - - faculty strength in some universities / institutes

S. No.	University / Institute	Professor*	Associate* Professor / Reader	Assistant * Professor / Lecturer	Contractual** appointment	Faculty strength	Intake of students
1	Amity University Noida	-	02	06	-	08	NI
2	Bundelkhand University Jhansi	-	-	01	-	01	40
3	Dr. B.R. Ambedkar University Agra	01	-	-	01	02	15
4	Dr. H.S. Gour Vishwavidyalaya Sagar	01	01	-	-	02	18
5	Kurukshetra University Kurukshetra	03	01	01	-	05	20 + 5 (additional)
6	NICFS (affiliated to Guru Gobind Singh Indra Prastha University, Delhi) Delhi	-	01	01	04	06	26
7	Osmania University Hyderabad	-	-	-	01	01	NI
8	Panjab University Chandigarh	01	-	03	-	04	NI
9	Punjabi University Patiala	03	01	02	-	06	20
10	Sam Higginbottom Institute of Agriculture, Technology & Sciences Allahabad	01	-	04	03	08	30

★ : or equivalent; percentage of time available for M.Sc. (FS) is unknown

★★ : Whether full time (or) part – time is unknown; guests not given

NI : Not indicated

NICFS : National Institute of Criminology and Forensic Science

 Table 56 : M.Sc. (Forensic Science) Course - - - pedagogics at some universities / institutes

	University / Institute		No. of papers		Practical	Tutorial	Attachment	Whether attachment	
University /	University / Institute	Theory	Practical	hours / week	hours / week	hours/ week	to FSL (no. of days)	is a part of degree programme	Topics covered
1	Amity University Noida	28	06 and Dissertation	19	07	05	30	Yes	Forensic ballistics, biology, chemistry, documents and finger print, serology, and toxicology
2	Bundelkhand University Jhansi	14	05 and Dissertation	NI	NI	04	NI	Yes	General forensic science, ballistics, biology, chemistry criminology and law, documents, explosives, finger print, research methodology, serology, and toxicology
3	Dr. B.R. Ambedkar University Agra	08	02	24	18	NI	21	Yes	General forensic science, anthropology, ballistics, biology, chemistry, computer forensics, criminal

Contd.

 Table 56: M.Sc. (Forensic Science) Course - - - pedagogics at some universities / institutes (Contd.)

									law, document, finger print, forensic medicine, instrumentation, serology including wild life forensics, and toxicology
4	Dr. H.S. Gour Vishwavidyalaya Sagar	16	08	24	18	NI	30	Yes	General forensic science, ballistics, biology, chemistry, criminalistics, Cr P.C. 1973 and Evidence Act, cyber forensics, documents, drugs of abuse, fingerprints, forensic medicine, instrumentation, medical jurisprudence, physics, polygraph, serology / DNA, and toxicology
5	Kurukshetra University Kurukshetra	12	06 and Project	12	08	NI	Started recently; 1st batch passes out in June 2010	NI	General forensic science, anthropology, ballistics, biology, chemistry, documents, finger print, forensic medicine, psychology,

 Table 56: M.Sc. (Forensic Science) Course - - - pedagogics at some universities / institutes (Contd.)

									serology / DNA, and toxicology
6	NICFS (affiliated to Guru Gobind Singh Indra Prastha University, Delhi) Delhi	12	07 and Dissertation	22	08	NI	30	Yes	General forensic science, ballistics, biology, chemistry, computer forensics, documents, photography, and physics
7	Osmania University Hyderabad	25	06 and Dissertation	34	11	05	NI	Yes	NI
8	Panjab University Chandigarh	12	16 and 4 case files	NI	NI	NI	Started this year only	Yes	General forensic science, anthropology, audio video analysis, , ballistics, biology chemistry, criminology, documents, drugs of abuse, explosives, finger print, immunology, instrumentation, odontology, osteology, physics, psychology, quality management , serology / DNA, statistics, and toxicology

Table 56: M.Sc. (Forensic Science) Course - - - pedagogics at some universities / institutes (*Contd.*)

9	Punjabi University Patiala	16	07 and Special report	20	15	NI	55	Yes	General forensic science, ballistics, biology, chemistry, criminalistics, document, finger print, photography, serology, and toxicology
10	Sam Higginbottom Institute of Agriculture, Technology & Sciences Allahabad	29	07 and Dissertation	24	18	03	90	Yes	General forensic science, ballistics, biology, chemistry, documents, explosives, fingerprint, physics, sociology, and toxicology

FSL : Forensic Science Laboratory

NI : Not indicated

NICFS : National Institute of Criminology and Forensic Science

From employment angle, it is disheartening to know that MSc (FS) passed boys and girls are working (for consolidated monthly remuneration ranging from Rs. 5,000/- to Rs. 10,000/-) as Forensic Analyst / Forensic Associate / Analyser at Central and State FSLs, on ad hoc contract basis. Aptitude and standards of forensic science pass outs are comparable to students of other streams of Science and Technology. There are however some views on their employability and performance (Table 57) worth contemplating.

Table 57: Employability and performance by forensic human resource entrants, as viewed by Central forensic establishments

S.No.	Educational	CFSL	CFSL Hyderabad	CFSL Kolkata	CFSL, CBI New Delhi	GEQD Hyderabad	GEQD Kolkata	GEQD Shimla
	qualification	Chandigarh	,		New Delili	пуцегарац	NUIKata	SHIIIIIa
1	Person with B.Sc.	Not	Not	Poor				
	(Forensic Science), and	eligible as	eligible as	Not eligible	Good	No comment	No comment	No comment
	M.Sc. (Forensic Science)	per R/R	per R/R	as per R/R				
2	Person with B. E. / B.							
	Tech. (core subject), and	Not	Not	Poor				
	M.Sc. (Forensic Science)	eligible as	eligible as	Not eligible	Good	No comment	No comment	No comment
	/ PG Diploma in	per R/R	per R/R	as per R/R				
	Forensic Science							
3	Person with B.Sc.							
	(core subject), and M.Sc.	Good	Good	Good	Good	No comment	No comment	No comment
	(Forensic Science)							
4	Person with M.Sc. / M.E.	Very good	Very good	Very good	Good	No comment	No comment	No comment
	/ M.Tech. (core subject)							
5	Person with M.Sc.							
	(core subject), and M.Sc.							
	(Forensic Science) / PG	Very good	Very good	Excellent	Good	No comment	No comment	No comment
	Diploma in Forensic							
	Science							
6	Person with M.E. /							
	M.Tech (core subject),	Not eligible as per R/R	Not eligible as per R/R	Not eligible as per R/R	Good	No comment	No comment	No comment
	and M.Sc.							
	(Forensic Science) / PG							
	Diploma in Forensic							
	Science							

The "demand" for MSc (FS) Degree holders (namely jobs with forensic related establishments) is present across India; but the quantum is not commensurate with the "supply". Another shade is that these aspirants need to prove their edge over the similarly placed from natural subjects. competitors science Recent core advertisements for recruitment to different levels of scientific posts at Central and State FSLs [Ref 97-102] have as a matter of mentioned forensic science as one of the eligible subjects. Tamil Nadu Public Service Commission has given further leverage in announcing that every thing being equal forensic science hands would be given preference [Ref 102].

Under the circumstances, presuming (may not be correctly though) that MSc (FS) study by itself ensures the pass out landing in appropriate forensic related job, and, considering the availability of openings with the user — industry (forensic institutions), the presently observed non — sync between "supply" and "demand" is because :-

- (i) supply is in much more excess of demand
- (ii) demand <u>per se</u> suffers owing to ban on recruitment / promotion, procedural delay, non readiness of recruitment rules, deputation mode filling related issues, and budget deficiency.

Regulation of forensic education and fast track recruitments hold some potential to address this mismatch.

7.3. Recommendation

Forensic education in India dawned in 1959 at Sagar University (Madhya Pradesh) and is in zenith with the most recent (2009) first of its kind Forensic University in Gujarat. The foregone half a century has yielded an interplay of courses from Certificate to Master's offered by variously funded Universities and private entrepreneurs. Considering the complexity of several contemporary issues in forensic education, the Consultants recommend its regulation by constituting a statutory autonomous body Forensic Council of India (FOCI) through a Forensic Act by the Indian Parliament (*Vide Annexure – III*).

