

PROFILE AND CONTRIBUTIONS

OF

**Prof. M.R. Doreswamy,
Founder Secretary, PES Education Society;
Chancellor, PES University and Adviser to the Government of Karnataka
(Education Reforms)**



Prof. M.R. Doreswamy (MRD),
an *Educationist Par Excellence*

A multitude of dynamic attributes are intertwined and synergized to manifest a multifaceted personality of Prof. M.R. Doreswamy. His profile and accomplishments are succinctly provided here in 3 sections: In Brief, In Detail and A Vision for Modernizing Education in Karnataka.

In Detail:

Name: M. Rama Naidu Doreswamy

Date of Birth: 7th November, 1937

Place of Birth: Narravuru, Chittoor District, Andhra Pradesh

Resident of Karnataka since >70 years: Brought up in Bangalore, since early School days (in Kannada); completed college education and blossomed into a noted educationist, humane social worker and philanthropist in Bangalore

Academic Qualifications: M.A. (Economics); B.L., Bangalore University

Professional Career:

1. Principal, Dayananda Evening College, Bengaluru
2. Principal, PES College, Hanumanthnagar, Bangalore
3. Member of the Senate, Syndicate and Academic Council of Bangalore University, Jnanabharathi-560056
4. Founder Secretary, PES Education Society, Bengaluru
5. Member of Legislative Council, Government of Karnataka (2005-2011)
6. Chancellor, PES University (2013 onwards)
7. Adviser, Education Reforms, Government of Karnataka (since January, 2020)

Communication:

- a. Residence: 990, 14th Cross, 21st Main, II stage, Banashankari, Bangalore
- b. Office: Chancellor, PES University, Banashankari III Stage, Bangalore 5600
Adviser, Education Reforms, Government of Karnataka, Room 260, II Floor, Vidhana Soudha, Bangalore 560001. Contact -

Awards, Recognitions and Distinctions Conferred:

1. Rajyotsava Award for distinguished service in Education by Karnataka State Government (1977)
2. Fulbright Fellowship to study best practices in US educational institutions (1985)
3. Kempe Gowda Award by BBMP (2000)
4. Aryabhatta Award by Aryabhatta Samskruthika Sangha (2001)
5. Honorary Doctoral Degree by the University of Mysore, Karnataka (2011)

Official Visits Abroad:

1. USA as a Fulbright Fellow (1985)
2. Europe as a Member of Legislative Council, Government of Karnataka

Social Service:

1. He had a high propensity for social work since school and college days. He used the high school vacation days for social work in his native place – Narravuru - formed a youth association provide civic amenities such as library & reading room and innovative street lamps mounted on stone pillars. The youth association also sensitized the villagers about the importance of cleanliness in public premises to prevent communicable diseases. The popularity of these programmes made the association to extend the programmes to nearby villages as well.
2. Observing that there was no public school in his residential locality, Thyagarajanagar, Bangalore, he galvanized support of like minded public personalities of the area to form an association and purchased a site/land and built a school for the children of Thyagarajanagar in 1965
3. As a student of St. Joseph's College, Bangalore participated in Literacy and Adult Education programmes in more than 20 slums in Bangalore
4. Founding member - 'Thyagaraja Co-operative Bank', N.R. Colony, Bangalore; at present with 12 branches across Bengaluru city
5. Founding member - Banashankari Welfare Society, Bengaluru
6. As Member of the Legislative Council, Karnataka Government, he espoused many fundamental issues relevant to education such as: government school adoption, abolition of liquor shops in the vicinity of schools (importance of academic ambience)
7. Played a key role in bringing IIT to Dharwad, Karnataka by organizing consultative meetings of key stakeholders

PES Educational Institutions Established by Prof. MRD:

TABLE - 1

No	Name of the Institution	No. of students/staff Courses Offered	Affiliation	Timeline
1	Samaja Seva Mandali (SSM) School, CT Bed, Thyagarajanagar, Bangalore www.			
2	PES Pre-University College Hanunthanagar Campus, Bengaluru Website: www.pes.edu	Students- 1200 Staff- 43 Courses: Commerce – GEBA, BASM, SBAC Science – PCMB, PCME, PCMC	Pre-University Board	1972
3	PES Degree College Hanumanthanagar Campus, Bengaluru Website: www.pes.edu	Staff – 60 Students - 1501 B Com., M.Com Ph.D. (Commerce)	Bengaluru City University (BCU)	1980
4	PES Pharmacy College Hanumanthanagar Campus, Bengaluru Website: www.pes.edu	Staff – 35 Students – 600 Courses: Pharma,.D B. Pharma, M. Pharma & Ph.D.	Rajiv Gandhi University of Health Science (RGUHS), Bengaluru	1982
5	PES Polytechnic Hanumanthanagar Campus, Bengaluru Website: www.pes.edu	Students – 720 Staff – 35 Courses: Diploma in Engineering- Automobile, Mechanical, Electronics & Communication and Computer Science	Directorate of Technical Education (DTE), Karnataka	1983
6	PES University, (Formerly PESIT) R.R. Nagar Campus, Bangalore Website: www.pes.edu	Staff- 410; Students- 8000 Courses - BTech (6 – BT,CSE,CIV,ECE, EEE, Mech); B.Arch, B.Des, BBA-LLB & BA-LLB (2); BBA, B.HEM MBA (1); MCA (1); M.Tech (12); M.Sc Engineering by Research (7), & Ph.D (11)	Established under a separate Act of Karnataka State Government	2013 (1988)

7	PES Institute of Medical Sciences & Research Kuppam, Andhra Pradesh Website:	Staff, including Doctors– 1145 Students- 1311 Courses: M.B.B.S., M.D. B.Sc (Alled), BSc Nursing	Dr. N.T.R. University, Andhra Pradesh	2002
8	PES Institute of Technology, Bangalore South Campus Website: www.pes.edu	Staff - 180; Students -3500 Courses – B.Tech (CSE, ECE, Mech), BBA , B.Com (from 2021), M.Tech		2005
9	The Amaatra Academy Sarjapura, Kasavanahalli Main Road, Haraluru, Bengaluru 560102 Website: https://amaatra.pes.edu	Staff – 50 Students - 1024 Classes -VIII to XII Standard	CBSE	2012
10	PES Public School Chittoor, Andhra Pradesh Website: www.pespublicschool.com	Staff- 40 Students- 800 I to XII Standard	CBSE	2014
11	PES Institute of Medical Sciences & Research With a 1100 Bed, Super Specialty Hospital at Bengaluru South Campus website: under construction	Propose to offer nationally relevant and globally sensitive medical/paramedical courses; research focus on socially relevant medical technologies and extension activities.	To be dedicated to healthcare services in Karnataka, shortly	

For more information, visit the Websites and Brochures enclosed

Vision and Mission:

Vision:

To establish high quality educational institutions in Karnataka and enable them to develop as institutions of international importance

Mission:

To align instructional courses, skill infused training and pedagogy with the emerging national and global trends

To strive for excellence in all the celebrated forms of knowledge – creation, transmission and technology development - with universal values, inclusive growth, women empowerment and social relevance, as cornerstones.

Unique Features of PES Educational Institutions:

- Enlightened mentoring and illuminating leadership by Prof. M.R. Doreswamy, Chancellor, PES University & Adviser, Education Reforms, Government of Karnataka
- National and Global brand name
- Leveraging socioeconomic development of Karnataka through high quality education – ‘Education is Empowerment’
- World class physical and academic infrastructure
- Library as a modern hub of teaching, learning and research activities
- Instructional courses aligned with emerging national needs, global trends
- Dedicated and highly qualified academic staff
- Sincere, competent technical and supportive staff
- Globally competent online education and evaluation capabilities
- Excellent national and international placement record
- Focus on holistic personality development of students
- Global recognition for student achievements, listed by FORBS - Under 30 Student entrepreneur of the year (2021)- water conservation (Ms Garvita Gulhati, a BE, 8th Semester Electronics & Communication @ PESU)
- Collaboration with reputed international institutions for student exchange and Twinning programmes
- MoUs/Agreement with 9 reputed Indian Universities, 31 Indian industries/ universities, 17 universities
- Value added, optional, credit-based course on one of the 3 great personalities – Mahatma Gandhi, Vivekananda and Sir. M. Vishveshvaraya. The credits earned reflected in the marks cards, to the advantage of the students. Instruction and library support of this course is on par with other courses.
- Innovative student support systems – Students scoring >8 PGCA are awarded with merit scholarships, every semester - 20% of the fee paid
- Highly rewarding collaboration with Defense Research and Development Organization (DRDO) and globally recognized accomplishments in space research, rivaling national institutions
- Substantial contributions to CM’s and PM’s relief funds to alleviate human tragedies due to natural disasters and COVID-19 pandemic
- Adoption of 40 government schools across Karnataka for development as part of CSR activities
- Inculcation of Individual social responsibilities among students and discharging Institutional Social Responsibilities

Best Practices in PES Education Institutions:

1. Mentoring – ‘teachers as academic parents’
2. Meaningful celebration of public holidays
3. Yoga and Meditation
4. Value education
5. Digitally networked campuses for efficient administration
6. Environment friendly, green campuses with impressive academic ambience
7. 24 X 7 campus security
8. Priming students for outstanding performance
9. Efficient feedback system to address student grievances
10. Encouraging innate artistic talents of students in fine arts, performing arts, sports and leadership
11. Promotion of leadership among academic staff at all levels
12. Innovative student support systems and campus facilities
13. Recognition and reward of meritorious staff and students
14. Top class hostel facilities
15. Self-sustained Transport Facilities
16. Harmonious relationship among all the stakeholders
17. Construction of 70 houses and rendered community service by PESU in flood ravaged Golival village, Raichur District (one of the 6 371-J districts) in association with GTTC, MICO and NTTC.
18. Construction of 11 new schools in the flood ravaged districts of Chikkodi and Vijayapura districts in North Karnataka
19. Empowerment of >5000 school dropouts by PESU through free vocational training in carpentry, Turner, Fitter, Electrician and TV repair programmes
20. Distribution of food packets at Covid Care Centers in Bangalore.

MoUs/Collaboration/Agreement with Foreign Universities and Industries:

(Foreign Countries involved – USA, Canada, UK, Brazil, Japan, Malaysia, Taiwan)

1. IOWA State University of Science and Technology, USA
2. North Dakota State University, USA
3. Binghamton University, New York, USA
4. Arizona State University, USA
5. Missouri University of Science and Technology, USA
6. IOWA State University, USA
7. The University of California, Irvine, USA
8. Dalhousie University, Canada
9. The University Court of The University of Edinburgh, UK
10. Swansea University, UK
11. SBX Corporation, Japan
12. Taylor's University, Malaysia
13. Nanhua University, Taiwan
14. National Taipei University of Technology, India campus
15. Escola Politecnica Da Universidade De Sao Paula, Brazil

Individual and Institutional Social Responsibilities:

PES educational institutions promote holistic personality development of students in terms of traditions, values and cultural heritage and help them to acquire an identity sensitive to national and global needs. A Mentoring System comprising 1 teacher per 25 students (academic parent), helps the students to access all the facilities, services and opportunities available on the campuses and develop 'Indianness' that manifests cherished qualities of Dharma, Shanthi, Sathya, Religious tolerance and respect for nature. These attributes of the PES alumni provides them with a competitive edge in any academic and/or profession they choose in India or abroad. No wonder, PES alumni have brought laurels in various professions of their choice in more than 50 countries including major knowledge/business hubs like USA, Europe, Australia, Canada, Japan, Singapore, Malaysia, Gulf, and China.

Innovative Student Support Schemes:

Research and Extension Activities:

All the PES institutions carry out research and extension activities and thus have emerged as leading institutions in their own niche by aligning their mission objectives with the priorities set by NEP 2020. For instance, institutions offering school education are planning to integrate Early Child Care Education (ECCE) into the school education system, a path breaking move recommended by NEP 2020. Until now, it may be noted that the Kindergarten/Anganwadi system was looking after pre-school child education. Preparations include providing ECCE by the institutions themselves or open admissions for children who have cleared ECCE elsewhere. In the case of the former, infrastructural and human resources issues need to be sorted out. To facilitate this challenge, admin and teaching staff would be specially sensitized regarding the requirements of ECCE to prime them for immediate implementation whenever the state/national regulatory authorities notify the orders.

These institutions have been lending academic support to the needy government schools by sharing their facilities, training teachers and organizing thematic programmes to leverage academic activities. Other activities include skills training from 6th standard onwards, exposure to selected international languages and promotion of leadership at all levels of school administration and governance, as prescribed by NEP.

The same themes, with contextual customization, are being implemented by the concerned institutions offering PUC/equivalent education.

The PES University has commenced training programmes for college teachers regarding their role to integrate the recommendations of NEP 2020. For instance, online education has become an issue in terms of appropriate technologies and their usage to reach out to the students. As per the recommendation of Prof. MRD to the State Government and MHRD/UGC/other regulatory authorities, PESU has commenced functioning as an Online Education Resources Centre (OERC) to the needy colleges and schools.

On the research front, PESU Research Foundation has accomplished outstanding achievements by building 2 satellites for DRDO and both of them have been successfully launched by ISRO with nationally important payloads. Details are provided in the enclosed Annexure. Participation of selected students (> 9 CGPA score consistently) along with staff is a unique feature, a first among universities and institutions across the country.

Contributions as Adviser, Education Reforms, Government of Karnataka

Prof. MRD accepted the invitation of the Government of Karnataka to be its Adviser for education reforms with the sole intention of bringing his 5+ decades of rich experience in PES Education Institutions to the public domain.

Prof. MRD, after assuming office on 13th of January 2020, has submitted 18 recommendations. A book of these recommendations has been released by honble Chief Minister of Karnataka, Sri B.S. Yediyurappa in an official function at the Banquet Hall, Vidhana Soudha, Bengaluru on 24th November, 2020. It is noteworthy that the National Education Policy (NEP) 2020 supports all these recommendations in a big way. They are listed below with a brief note for each recommendation, as below:

A. Specific to School Education:

1. Adoption of government schools for development by all the elected representatives from the State (MLAs-03, MLCs-03 and MPs-05 (including Rajya Sabha members)
- 2.

This was the first recommendation to the State Government, within a week after assuming charge as the Adviser. Recognizing its significance Sri B.S. Yediyurappa, hon'ble chief minister of Karnataka, included it in the budget proposals for the year 2020-21 with funds allotted from Legislators' Area Development for every year.

Prof. MRD has also convinced 35 universities/autonomous colleges to join hands with the government to leverage school education in terms of academic programmes.

These two initiatives have been implemented for the first time in the country and have received accolades from educationists and the general public. All the elected representatives have received 'Government School Adoption Certificate' by hon'ble chief minister in the official function held on 24th November, 2020) mentioned above).

Although the elected representatives are expected to adopt 3/5 government schools, all cabinet ministers have adopted 05 schools whereas some of the legislators have adopted many more. Sri Chidananda, a BJP MLC from Tumkur District has adopted 32 government schools, 01 per each of the 32 talukas coming under his electoral jurisdiction. Similarly, The New Indian Express group, representing press/media has adopted 10 schools in 371-J districts of Kalyana Karnataka. Such an overwhelming response has ignited the government's efforts to explore additional avenues for enlisting philanthropic support for this programme.

These are listed below:

- a. Government schools in which the Jnana Peet awardees from Karnataka (8) have studied - approved in the State budget for the year 2021-22
- b. Special provision made for philanthropists and NRIs from Karnataka under ‘My Birth Place-My Contribution’
- c. A State-Corporate platform is contemplated to enlist the support of IT companies and corporate/industries, in a big way
- d. 22 priorities have been identified for the development of adopted government schools; 15 for physical infrastructure and 07 for academic empowerment.
- e. Prof. MRD has conducted 2 video conferences to monitor development undertaken by the universities/autonomous colleges
- f. Coordinating efforts have been made to fully utilize the funds from hon’ble Prime Minister’s Jal Jivan Mission, which is implemented in Karnataka under Parihara programme. Under the scheme, the Rural Development and Panchayat Raj Department provides safe water for drinking, kitchen and toilets. Prof. MRD has toured 3 taluks viz., Ramanagar, Chennapattana and Magadi of Ramanagara District to personally review the works completed under Parihara programme for the year 2020-21. A detailed report on the review has been submitted to the government for further needful
- g. A State-level Monitoring Committee is constituted to review progress of development in adopted government schools. Experts and noted personalities from different walks of society are members. The committee would earnestly commence functioning as soon as normalcy returns from covid-19 pandemic lockdown.
- h. All the key officials of the school education department – BEOs, DDPIs, Commissioner of Public Instruction and Principal Secretaries of Primary & Secondary Education and Rural Development departments are kept in the loop for effective implementation of the recommendations made by Prof. MRD and NEP 2020.
- i.

It is also noteworthy that the State Government has approved 2 recommendations in the budget for 2021-22 for implementation viz., 1) Development of government schools in which 8 Jnana Peeta awardees have studied

B. Specific to Higher Education:

3. Leveraging the quality of educational services by adopting 'cluster' concept

A Cluster is a group of education institutions in a given region/geographic location identified to form a functional loop. A lead institution in the cluster would be the best institution with advanced facilities, which are shared with the member institutions of the cluster. This measure helps to compensate the lacunae in physical and academic infrastructure in institutions as well as lending teachers to complete academic calendar in time. The system is widely known in the schools. NEP 2020 has taken this into the next level and recommends implementation to cover all schools.

Prof. MRD has called for the universities to proactively involve in development of schools in their vicinity, particularly to leverage academic services in government schools. In addition to the 15 priorities infrastructure development, 07 academic priorities have been identified for the development of adopted government schools. Key academic parameters include involvement of the university departments to train school teachers in respective subjects through thematic programmes.

Similarly, A lead college could take up these responsibilities to leverage services of the surrounding colleges, particularly new colleges. Prof. MRD envisions involvement of all professional colleges also in this initiative to facilitate novel liberal arts courses and similar science courses in the colleges, as recommended by NEP, 2020.

The twin objectives of developing schools and colleges would be most useful to institutions in socially underdeveloped areas/regions such as 371-J Kalyana Karnataka districts (SEZs as recently proposed by NEP 2020).

4. Establishment of a dedicated university for disabled students (Divyang)

Divyang (disabled) students belong to an unfortunate section suffering extreme neglect by the society. In addition to the assistance extended to them, those eligible need to be empowered to enter society as productive citizen. Towards this objective, Prof. MRD has recommended to establish a dedicated university for divyang students, on the lines of 2 such UGC approved universities in UP.

In the above context, the UN World Report on Disability (2011) and the historic Rights of Persons with Disability Act/Rules (2016/17) brought by hon'ble prime minister Sri Narendra Modi and NEP 2020 are in favour of exploring innovative programmes to help divyang students.

It is all the more important that divyang should be helped in the highly testing times of COVID-19 pandemic.

5. Employability infused undergraduate degree courses – Introduction of Liberal Arts and similar courses in Sciences

NEP 2020 has opened up new vistas in higher education by breaking the conventional barriers among the c viz., conventional disciplines of Arts, Science, Commerce & Management, Education, Law, Agriculture and Engineering to offer an opportunity to the students to select a subject combination of their choice, under the internationally prevalent Choice Based Credit System (CBCS). This measure facilitates mobility of students across national and international institutions as well as offers employability to students after undergraduate degree, if they desire so by choosing such subjects.

Together with colleges moving towards autonomous status, as degree awarding institutions, introduction of liberal arts and similar degrees in science would move the education system nearer to the industrial needs by appropriate training in skills.

It is also recommended that high standards in skill certification mechanisms, the objective of enabling students with opportunities in knowledge economy are enhanced.

6. Selection of a 'Visionary' as Vice Chancellor

Emerging global trends and national needs call for entrusting leadership of educational institutions at all levels to visionaries with values, which are competent to take on the academic challenges of enhancing productivity through knowledge activities. However, the present scenarios across the country shows no such trends and urgent interventions have become necessary.

For this purpose, amendments to provisions of Karnataka State Universities Act, 2000 have been proposed. Key aspects include freedom and accountability to the Screening committee to empanel competent academicians. It is recommended that the screening committee may invite a competent academician from national/international institutions/NRIs, in case none of the academicians who have applied do not measure up to the expected standards. Thus, checks and balances are built into the process so that outstanding academician would be invited to occupy the exalted position of Vice Chancellor.

The proposal has received exceptional support from educationists and other stakeholders; it is under active consideration of the government.

C. General Recommendations – Applicable to all levels of education:

7. Significance of Mentoring in education

India has a rich tradition of mentoring – the Guru-Shishya Parampara – is a well-known best practice in education across the world. NEP 2020 also recommends integration of mentoring at all levels of education and has recommended establishment of a ‘National Mission for Mentoring’ to leverage the quality of educational services.

8. Meaningful celebration of public holidays in educational institutions

The proposal calls for the educational institutions celebrating the public holidays in memory of great personalities such as Valmiki, Basava, Kanaka Dasa, Mahatma Gandhi, Dr. B.R. Ambedkar and Mahaveera meaningfully by organizing thematic lectures, programmes on the holiday, instead of closing down the institutions. This measure not only ensures sensitization of the young students regarding the life and times of these great personalities but also orients them towards the rich cultural heritage of India.

9. A special education policy for districts covered under Art. 371-J of the Constitution (Kalyana Karnataka)

Article 371-J of the Constitution provides for addressing regional imbalances in a State in terms of Education, Health and Agriculture. In Karnataka, 6 northern districts viz., Gulbarga, Yadgir, Bidar, Raichur, Bellary and Koppal (Kalyana Karnataka) have been identified for benefits under Art. 371-J. In line with the adage ‘Education is Empowerment’ a special education policy has been proposed for Kalyana Karnataka focusing on delivery of contemporary education services in terms of language empowerment, skills training, infusion of employability in UG degrees, Teachers’ training etc,. NEP 2020 also recommends that Special Education Zones (SEZs) be created to address regional imbalances.

The recommendation by Prof, MRD also covers other similar areas of the state scattered across the State, to reach out to all socially and economically weaker students.

10. Establishment of Skills Development Centers

This recommendation focuses on translating the 'Skill India' programme unveiled by hon'ble Prime Minister Sri. Narendra Modi. Although each of the 31 districts of Karnataka require a Skill Development Center, in the first phase 4 or 5 may be established in strategic locations across the State to cover the entire State. Each centre is planned to comprise facilities for language empowerment, employable skills for uneducated, school dropouts, 12th standard passed, PUC passed and graduates, to enable them to enter the national main stream as productive citizen. Skill Certification aligned with ILO standards is proposed to equip the students with employability across national and international levels.

11. Language empowerment – Establishment of 'Centers for International languages'

In state/national/global knowledge ecosystems, it is the communicative skills of the students that provide widen the latitude of employment and a competitive edge for professional success. To empower students with communication skills, establishment of 5 Center for International Languages, strategically located to cover the entire state. Each Center could be designed to function as a Languages Academy to translate the recommendations of NEP 2020 for language empowerment from school to higher education. Providing for research and translation activities, in association with the Indian Institute for Translation and Interpretation (IITI), promotion of all the 22 languages listed in the schedule-8 of the Constitution could be promoted and tailored for the use of the region. For example, in Karnataka there are 3 coastal languages viz., Tulu, Kankani and Barry, which not under schedule-8. Their literary treasures could be harnessed to enrich the history of state/national languages through translation studies. A noteworthy assignment to these centers would be to prevent the extinction of Indian languages, a threat warned by the UN.

12. Online education during lockdown due to viral pandemic and natural disasters

A need for the school and higher educational institutions to acquire online education competencies is conveyed to the State Government. In recent years the state is facing severe onslaught of natural disasters. The recent COVID-19 pandemic challenges our conventional pedagogy to adapt to the changing situations.

As part of these adaptations, it is proposed to establish specially designed Online Education Resources Centers (OERCs) in all the universities to facilitate training of teachers, schools and colleges to reach out to students and deliver educational services so that there is no academic loss in terms of curricular content and also academic year.

The proposed system is designed as a hybrid automobile which uses either fuel or power depending on the context. Likewise, OERC facilitates schools/colleges to opt for conventional or online education, depending on the prevailing situations.

OERCs are to be located at a vantage point to establish a databank of national/global best practices in online education and deliver them after suitably customizing them to the local and regional conditions, to schools and higher educational institutions.

13. Online delivery of question papers

In addition to the issues discussed in (11) above, this measure is to enhance transparency in the conventional system of question paper delivery across Karnataka which employs large manpower. There have been repeated episodes of scams in the system, which need to be plugged to gain public trust. It is also noteworthy that about millions of students are appearing for examinations by state authorities such as PUC Board, SSLC Board and Universities with more than 200 colleges spread over wide geographical localities.

It is recommended that the proposal could be implemented in phases, involving NIE/reputed IT giants in Bengaluru city to train the personnel in modern methods of online delivery and related security systems.

14. Establishment of a State-Corporate platform to fund special education projects

Given the financial constraints on the state government, alternative ways of resources mobilization is the need of the hour. This need is accentuated due to repeated episodes of natural disasters and the recent COVID-19 viral pandemic. Therefore, it is recommended to create a State-Corporate platform to create a corpus fund for taking up a range of special education projects – to create facilities as well as put in place novel service systems.

NEP also recommends to actively pursue 2 types of PPP models viz., Public Private Participation and Private Philanthropic Participation.

15. Integration of value education at all levels of education

India has a rich heritage of culture and values that have attracted other civilizations in the past as well as countries in modern times. NEP 2020 prescribes inculcation of values enshrined in the Constitution viz., Sathya, Dharma, Shanthi,

Religious tolerance and respect for nature, in all students. In addition, inculcation of professional ethics has also been prescribed in a big way.

Prof. MRD has already edited a book of 31 selected moral stories in Kannada, authored by the staff of PES educational institutions (under print). Preface of the book is written by none other than Swami Veereshananda, Head of Ramakrishna Mutt at Tumkuru, Karnataka a well-known and learned seer. The book will be distributed freely to all the 48,000+ government schools in the state, shortly.

Similar books for different levels/disciplines of education are under preparation.

16. Yoga and meditation to promote 'Indianness' among students

Although Yoga and Meditation have received global recognition, their significance is yet to be fully understood by our youth. UN has declared 13th June as International Day, celebrated all over the world every year.

Hon'ble Prime Minister Sri Narendra Modi has gifted, Karnataka, particularly Bangalore an International Yoga Center which could be a valuable resource for training school teachers and yoga trainers who in turn amplify the results at the institutional level and involve general public also as part of healthcare boosters.

Prof. MRD has also recommended to exploit global business opportunities available by marketing yoga related articles, dresses, mats, footwear etc., by entrepreneurs through venture capital.

17. Establishment of an Administrative Tribunal for education institutions in Karnataka

This proposal calls for institutionalizing quick delivery of justice which also confers due identity to the educational ecosystem in Karnataka. At present, service matters of staff in government educational institutions involves participation of administrators at both ends of the justice i.e., as regulatory officers as well as judicial reviewers of the very orders they themselves have passed. This dualism would be removed to enhance transparency through an exclusively, state level education tribunal.

The tribunal may be organized on the lines of existing tribunals for service matters of other government staff – a judicial member as the chairman and an academic administrator as a member. The number of benches however may be a

minimum of 2, commensurate with the requirements of the organization structure of education i.e., Primary Education and Higher Education.

18. 'Prevention Is Better' policy to ensure minimum standards in educational institutions

This recommendation exhorts the government to ensure prescribed standards at the level of permitting new educational institutions to avoid conflicts and complications later, affecting the prospects of the students and therefore the quality of professional and skilled workforce required for national productivity.

A two-pronged strategy needs to be adopted:1) revisiting the existing rules/regulations to align them with the stringent quality/standards mandated by NEP 2020 for school and higher education and 2) tighten the procedures for sanction of new institutions so that dilution at the cost of students is avoided later.

Functioning of the existing institutions could be monitored by a transparent monitoring process by experts in letter and spirit.

19. Providing 'academic ambience' in educational institutions

This recommendation calls for a dialogue between the education and excise departments to resolve some pernicious practices that seriously affect the academic ambience of educational institutions. At present, the academic ambience of educational institutions is vitiated due to liquor shops nearby, in some cases adjacent too. Such scenarios are a threat to maintenance of discipline and academic ambience in educational institutions. The matter is compounded by the liquor shops indulging in drug marketing and other such heinous criminal activities, negatively impacting the health and orientation of the students. This issue needs to be addressed on a priority basis to keep the morale of the students as well as educational institutions in the right place.

To accomplish this objective, Prof. MRD has called for a meaningful dialogue between the two regulatory departments i.e., the education department which permits schools/colleges and the excise department which permits liquor shops, to address this pernicious issue.

The existing provisions of relevant legislations (Acts/rules) may be amended to resolve the issue in favour of education, because 'education is empowerment' of the student and the nation.

Note:

- a. All the 18 recommendations are synergized with NEP 2020
- b. The book of recommendations, officially released by hon'ble Chief Minister, is dedicated to all Teachers
- c. An official Tagline 'From Letters towards Excellence' is recommended to the Government for adoption; it signifies the importance of high quality education at all levels – from KG to PG and Research Degrees.

Additional Recommendations made to the Government:***General- Applicable to All Levels of Education:***

1. Action Plan to implement NEP 2020 for school education
2. Action Plan to implement NEP 2020 for school education
3. Establishment of a 'State Mission on Mentoring' on the lines of National Mission on Mentoring envisaged by NEP 2020
4. Establishment of a Rajya Shikshana Ayoga (RySA) in line with the recommendations of NEP
5. Create robust interfaces between academia and state administration for smooth implementation of NEP 2020 and periodic reviews by Ministry of Education
6. Establish a Database of 'Emerging Global Best Practices in Education Technologies' for school & higher education
7. Establish a Industry-Academia platform with Federation of Karnataka Chamber of Commerce and Industries (FKCCI) in all universities to enhance placement opportunities
8. Develop Libraries at all levels, commensurate with the requirements of NEP 2020; prime university libraries as 'Knowledge Centers' in their own right
9. Evolve a uniform set of rules/regulations/statutes for transparency in examinations (Examination Manual), separately for school, polytechnic and higher education levels
10. Procedures to conduct online examinations during pandemic lockdown
11. Harness the expertise of S-Vivekananda University for Yoga, Jigani, Bangalore, Karnataka to train teachers and design curricula for students.
12. Establish a 'Leadership Academy' to enhance performance of students and teachers in academic administration and public life
13. Establish a Language Academy to strengthen the state language - Kannada vis-à-vis the other 21, schedule-8 languages. Focus on empowerment of students with international languages, commensurate with the level of education, to use the 'power of language' to hone their communication skills as well as widen their professional opportunities and employability across the globe
14. Sensitize education department staff regarding the emerging global education technologies through training programmes

School Education:

15. Train school and higher departments' staff regarding their responsibilities to implement NEP 2020 in Karnataka and the preparations thereof
16. Considering teachers as 'Corona Warriors' for vaccination on priority
17. Establish Teachers' Academies for training in the requirements of NEP 2020 and fundamental attributes of emerging pedagogy, educational technology, value education and mentoring
18. Compensation for teachers' families who died on duty as 'Corona Warriors'
19. Revisit the rules/regulations/statutes regarding service matters of teachers at all levels; align them with appropriate national regulators
20. Take urgent curative/administrative measures to implement the verdict of hon'ble Supreme Court (Justice Verma) to prevent commercialization of B.Ed. colleges/teacher education in Karnataka. Initiate simultaneous academic audit and measures to inject quality into teacher education
21. Constitution of 'school clusters (complexes)' across the state, in line with the recommendations of NEP 2020
22. Digital Health Cards to students of all the 48000+ Government schools in Karnataka, transferable along with the student to the next institution. Database of health profiles to be evaluated to plan interventional programmes for healthcare, disabilities, student support systems and other curative measures
23. Introduce a 'Group Health Insurance' scheme for all the students of 48+ government schools in Karnataka
24. Complement creation of Special Education Zones (SEZs) by introducing innovative student support systems and merit scholarships to reach out to socially and educationally developing groups (SEDGs)
25. Avoid drafting the services of teachers for election work, as per the recommendations of NEP 2020

Skill Development and Employability:

26. A Skill Development Center in each district – implement in phases
27. Widen the spectrum of diploma courses offered by Polytechnics by including medical, paramedical themes. Focus on training uneducated persons and school dropouts in employment enhanced programmes.
28. Develop a globally valid 'skill certification' procedure in aligned to ILO standards
29. Disaster management training to all administrative staff at the cutting edge of relief work (Revenue, Police and related services etc.), sensitization programmes for teachers, students and general public.

Higher Education

30. Equip UG and PG degree laboratories commensurate with the requirements of the new generation Liberal Arts and similar science courses, to enhance skills and employability
31. Strengthen 'International Students' Admission Policy' in line with state/national laws
32. A screening system the research topics for projects to funding agencies, Ph.D., and post-doctoral research for their social relevance to nationally/globally prioritized areas.
33. Zero tolerance for plagiarism in Ph.D. programmes, projects submitted to funding agencies and research publications
34. Implement the apex court judgments regarding minimum standards for recruitments to teaching posts, establishment distance education study centers and other rulings pronounced from time to time
35. Constitute a Legislature Committee to examine the annual reports of universities for compliance with the prescribed parameters, thereby evaluate educational outcomes and accountability – Value for Investment of public funds. Performance based Incentives to universities
36. Evolve a uniform academic framework for the UG/PG degrees applicable to state universities, as prescribed by the concerned national regulator/s, total number of credits, core and non-core subjects to be offered in the foundation course, open electives, weightage for value education etc.,
37. Rationalize procedures for conduct of Convocation by universities
38. Grant autonomy to colleges which are accredited with 'A' grade by national Assessment and Accreditation Authorities
39. Revisit statutes/regulations regarding autonomous colleges to facilitate meaningful functional freedom with accountability
40. Widen the scope of the UGC-Paramarsh scheme (2019) – College Clusters - across the state to address regional imbalances in college development, particularly in the 6 districts of 'Kalyana Karnataka' identified under the Article 371-J and other similar regions in the State.
41. Proactively seek the involvement of national institutions in Karnataka (IISc, IIT-Dharwad, IIIT-Raichur, NLSIU, SAI, etc.,) to mentor state universities for novel curricular development, sharing expertise and promotion of sports activities in a big way
42. Identify a panel of experts to sensitize colleges for NAAC Assessment and Accreditation (preparation of SSR, mock visits, Principal's presentation, interactive sessions with IQAC and Departmental Heads etc.,)
43. Constitute a screening committee for nomination of academic council and syndicate members of state universities, under the chairmanship of a retired high court/supreme court judge
44. Usher in administrative reforms in line with NEP 2020

Research and Publication:

45. Evolve a Research Policy for the state educational institutions, keeping in view of the new National Research Foundation (NRF) to be established by MHRD, which would be the premier national funding agency. Prime the universities to get full flow of benefits from NRF by prioritizing their research areas
46. Encourage interdisciplinary research for generation of implementable patents and technologies in socially relevant and nationally/globally prioritized areas – climate change, community medicine, waste water recycling, solid waste management, super computers, biotechnology for agriculture, preservation of biodiversity and other human welfare areas
47. Encourage universities to bring out global standard journals, high quality text books for all levels of education, on time, commensurate with the dynamic curricular requirements as per NEP 202
48. Network Karnataka State RDPR University at Gadag with IIT-Dharwad to generate region-specific, rural technologies for agriculture and related activities

3. A Vision for Karnataka to modernize education system:

At the top of the agenda is development of all knowledge systems to build a knowledge society competent to meet the challenges of the technology dominant 21 century global ecosystem. India has made tremendous strides in space research based on a robust knowledge/technology platform of physical sciences. It is equally important to develop other knowledge systems on par to bring them on the same page so that they complement each other to propel the country to a competitive orbit of global knowledge economies.

In his quest to inject quality into educational services in the State, Prof. MRD has a well-structured blue print, borne out of his 5+ decades of experience and expertise in education. His vision transcends recommendations of NEP 2020 also to prime the knowledge ecosystem into finely tuned delivery systems to reach out to students from all sections of society, not just a privileged few from developed urban areas. These are summarized below:

- a. Given that >30,000/48,000 government schools in Karnataka require support in respect of physical infrastructure, particularly those affected by repeated episodes of natural disasters and prolonged lockdowns due to COVID-19 pandemic. In addition to the novel initiatives to boost adoption of government schools already taken, he proposes to involve the IT companies and industries/corporate to participate in school development in a big way.
- b. Skills training through special centers for school students coupled with a skill certification system aligned to ILO standards would help the students as well as uneducated stream to become productive citizen of the country

- c. Similarly, introduction of Liberal Arts undergraduate degrees and similar degrees in sciences would help boost higher educational outcomes to match the requirements of the industries.
- d. It is necessary to keep pace with the fast evolving education technology innovations to modernize teaching-learning activities at all levels of education. Prof. MRD has pointed out the advantages of using universities as hubs of developing commensurate online education capabilities in schools and colleges in their jurisdiction, by establishing an Online Education Resources Center (OERC).

Prof. MRD visualizes a 3-tiered system in which OERC occupies a key central role. On one hand it networks with the MHRD initiatives to its central database and on the other organizes training programmes to the teachers of schools/colleges to build online education capabilities. OERC also mentors the schools/colleges to equip themselves with the required hardware/software for online education.

The central database of a selected university may be assigned to add emerging global practices in online education in schools and colleges, to complete the loop.

- e. NEP 2020 hopes to mobilize at least 50% of the futuristic, 5 trillion dollar national budgets from knowledge related activities. To evolve into such a robust knowledge economy, implementable patents/technologies through interdisciplinary research covering globally prioritized key areas need to be promoted such as:
 - i) Sustainable Development
 - ii) Climate Change
 - iii) Nanotechnology
 - iv) Biotechnology (Agriculture, Healthcare, environment)
 - v) Data analytics
 - vi) Machine Learning
 - vii) Robotics
 - viii) Supercomputers
 - ix) Community medicine
 - x) Rural Health Services
 - xi) Entrepreneurship, venture capital
 - xii) Modern education technologies for teaching-learning
 - xiii) Encourage Indian authors to write text books for instruction as per NEP 2020 requirements
 - xiv) Encourage universities to publish journals of global standards
 - xv) Women empowerment
 - xvi) Solid waste management
 - xvii) Any other emerging area/s relevant to national needs

Epilogue:

Stakeholders of PES Educational Institutions have the high privilege of association with the towering personality of Prof. M.R. Doreswamy. His propensities for 'out of box' solutions to establishing top class educational institutions and dedicating them to the cause of education in Karnataka have earned him leadership worthy of emulation by others and carved out a unique niche for PES educational Institutions at the state/country/global levels. These are amply reflected in his recommendations to the Government of Karnataka.

We wholeheartedly wish Prof. MRD, a pride of Karnataka, to succeed in all his educational ventures in the public domain, which are bound to leverage the quality of education in the state and nation.

ANNEXURES:

1. Recommendations submitted to the State Government and their relevance of NEP, 2020
2. Few Newspaper articles published by Dr.M R Doreswamy
3. Brochures of PES Educational Institutions
4. Karnataka Government Budget Proposals for 20-21 & 2021-22
5. Copies of Government School Adoption Certificates issued to Honble CM and Higher Educational Institutions
6. Priorities (22) identified for the development of adopted government schools
7. Book on Value Education for schools (Edited by Prof. M.R. Doreswamy)