पी.जी.डी.टी**—05**

अनुवाद में स्नातकोत्तर डिप्लोमा कार्यक्रम (पी.जी.डी.टी.)

अनुवाद परियोजना – 2020

(जनवरी 2020 और जुलाई 2020 सत्रों में प्रवेश लेने वाले विद्यार्थियों के लिए)



अनुवाद अध्ययन और प्रशिक्षण विद्यापीठ इंदिरा गांधी राष्ट्रीय मुक्त विश्वविद्यालय मैदानगढ़ी, नई दिल्ली—110 068

अनुवाद परियोजना — 2020 (पी.जी.डी.टी.-05) (जनवरी 2020 और जुलाई 2020 सत्रों में प्रवेश लेने वाले विद्यार्थियों के लिए)

कार्यक्रम कोड : पी.जी.डी.टी. पाठ्यक्रम कोड : पी.जी.डी.टी–05

जैसा कि आपको बताया जा चुका है कि 'अनुवाद में स्नातकोत्तर डिप्लोमा कार्यक्रम' (पी.जी.डी.टी.) को पूरा करने के लिए आपको छह–छह क्रेडिट के पाँच पाठ्यक्रम करने होंगे। इस स्नातकोत्तर डिप्लोमा कार्यक्रम का पाँचवाँ पाठ्यक्रम (पी.जी.डी.टी.–5) 'अनुवाद परियोजना' है। इस परियोजना के अंतर्गत आपको **(क) संलग्न सामग्री का अनुवाद करना है; और (ख) 'अनुवादकीय टिप्पणी' लेखन करना है।** ये दोनों कार्य करके आपको मूल्यांकन के लिए प्रस्तुत करना है। ध्यान रहे कि यह 'अनुवाद परियोजना' एक स्वतंत्र पाठयक्रम है। इसमें उत्तीर्ण होना आवश्यक है।

(क) अनुवाद कार्य करने का तरीका

प्रस्तुत सामग्री को ध्यानपूर्वक पढ़ें। इससे आप समझ जाएँगे कि यह किस विषय से संबंधित है और इसमें प्रमुखतया क्या कहा गया है। इसके बाद आप इस सामग्री में से उन शब्दों और मुहावरों आदि को छाँटिए जिनका अर्थ अथवा जिनके हिंदी पर्याय आपको पता नहीं हैं। इन शब्दों को एक कागज़ पर नोट कर लीजिए। छाँटे गए शब्दों के आधार पर यह ध्यान दीजिए कि अनूद्य सामग्री का अनुवाद करते समय आपको कौन—कौन से कोश देखने की जरूरत है। आप कोशों की सूची भी बना लें और जमा कराई जा रही परियोजना के अंत में उस सूची को भी दें। विषय के अनुरूप समुचित कोशों में से उन शब्दों के पर्याय नोट कर लीजिए।

अब अनूद्य सामग्री को एक बार पुनः पढ़िए। गौर कीजिए कि अब की बार यह आपको ज्यादा अच्छी तरह समझ आती है कि नहीं। यदि कोई अंश समझ में न आ रहा हो तो उसे फिर से पढ़िए और पता लगाइए कि कठिनाई कहाँ है – शब्दों का अर्थ समझने में अथवा वाक्य–विन्यास को समझने में। यदि कोई वाक्य समझ न आ रहा हो तो उसे दूसरी बार, तीसरी बार पढिए।

इस सामग्री में प्रयुक्त संक्षिप्तियों (abbreviations) पर भी ध्यान दीजिए। उनके पूर्ण रूप क्या हैं, जानने की कोशिश कीजिए। अधिकांश संक्षिप्तियों के पूर्ण रूप आपको इस सामग्री में ही मिल जाएँगे। हाँ, केवल अनुमान के आधार पर संक्षिप्तियों की पूर्ण अभिव्यक्तियाँ न लिखें।

आप जानते ही हैं कि अनुवाद करते समय अनुवादक विभिन्न युक्तियों को अपनाते हैं। इन्हें अपनाते समय जिन शब्दों आदि का अनुवाद करने में आपको कठिनाई अनुभव हुई हो, उन्हें आपने अपने अनुवाद में (i) यथावत ग्रहण (adoptation/borrowing) किया हो, (ii) उनका अनुकूलन (adaptation) किया हो, (iii) उनका प्रतिस्थापन (substitution) किया हो; या फिर (iv) 'परित्याग' (deletion) जैसे विकल्प को अपनाया हो तो उन्हें अलग से नोट कर लें। इसी प्रकार, यदि आपने कोशों आदि में अनुपलब्ध किन्हीं शब्दों के लिए (v) 'शाब्दिक अनुवाद' (word for word translation); या फिर (vi) 'भावानुवाद' (paraphrase) का सहारा लिया है तो उन्हें भी अलग से नोट कर लें। इसके अलावा, आवश्यकता के अनुसार अनुवादक कभी—कभी अनूदित पाठ में (vii) 'अनुवादकीय टिप्पणी का समावेश' (Inclusion of Translator's note or complementation) भी करते हैं। यदि आपने भी ऐसा ही किया हो तो उन्हें भी अलग नोट कर लें।

इस तरह अनूद्य सामग्री का अर्थ भली—भाँति समझ लेने के पश्चात उसका अनुवाद आरंभ कीजिए। अनुवाद करते समय भी उपयुक्त शब्दकोशों का भरपूर उपयोग कीजिए। जिन शब्दों के अर्थ आपको पता हैं उनके लिए भी शब्दकोश देखिए ताकि आप विषय और संदर्भ के अनुकूल पर्यायों का चयन कर सकें। जिन शब्दों के पर्याय आपको नहीं मिले हैं और मूल के अर्थ को ध्यान में रखते हुए आपने यदि नए शब्द गढ़े (coin) हैं तो उन्हें अलग से लिख लें और 'अनुवादकीय टिप्पणी' में उनका भी जिक्र करें।

वाक्य—विन्यास लक्ष्य भाषा की प्रकृति के अनुसार कीजिए। यानी आपका बनाया वाक्य ऐसा लगे कि आप अनुवाद नहीं कर रहे बल्कि उस भाषा में मूल रूप में लिख रहे हैं। ऐसा तभी होगा जब आपकी वाक्य—रचना स्रोत में कही गई बात का अनुकरण न होकर लक्ष्य भाषा की कथन—शैली के अनुरूप और सहज होगी। परंतु इतनी सावधानी बरतें कि आप मूल से भटक न जाएँ क्योंकि अति—स्वच्छंदता से ऐसा होने की आशंका रहती है। इस प्रक्रिया में शुरू में आपको अपेक्षाकृत अधिक श्रम करना पड़ सकता है, परंतु इससे आपको स्तरीय अनुवाद करने में मदद

अवश्य मिलेगी। कृपया जिन वाक्यों की संरचना क्लिष्ट है, उन्हें भी अलग से नोट कर लें और उनका अनुवाद करते समय आप जो प्रविधि अपनाएँगे, उनका भी 'अनुवादकीय टिप्पणी' में उल्लेख करें।

एक पैराग्राफ अथवा एक पृष्ठ का अनुवाद करने के बाद अपने अनुवाद को मूल सामग्री से मिलाइए और देखिए कि आपके अनुवाद का वही अर्थ निकल रहा है जो मूल कथन में कहा गया है। यदि अंतर दिखाई दे तो अपने अनुवाद में सुधार कीजिए। पूरी तरह आश्वस्त होने के बाद अनुवाद को आगे बढ़ाइए। अगले पैराग्राफ / पृष्ठ के अनुवाद के बाद फिर यही जाँच–प्रक्रिया दोहराइए और अनुवाद करते जाइए।

अनुवाद पूरा करने के पश्चात उसे एक बार फिर मूल सामग्री से मिलाइए और जाँच कीजिए कि आपका अनुवाद और मूल सामग्री समान अर्थ प्रकट करते हैं। यह भी जाँच कीजिए कि कहीं कोई पैराग्राफ, वाक्य अथवा वाक्यांश अनुवाद होने से छूट तो नहीं गया है। तत्पश्चात अनूदित सामग्री को हस्तलिखित रूप में साफ–साफ लिखिए अथवा टंकण की व्यवस्था कीजिए। यह अनुवाद पूरा करने का अंतिम चरण है।

(ख) अनुवादकीय टिप्पणी लेखन

आपको परियोजना के अनुवाद के साथ–साथ 1200–1500 शब्दों की एक 'अनुवादकीय टिप्पणी' भी लिखकर जमा करानी होगी। इस अनुवादकीय टिप्पणी में आपको अनुवाद कार्य करने के दौरान हुए व्यावहारिक अनुभव को शब्दबद्ध करना है। 'अनुवादकीय टिप्पणी' में आप निम्नलिखित पक्षों पर अपने शब्दों में प्रकाश डालेंगे :

- अनुवाद कार्य में प्रयुक्त पद्धति (जिसके अंतर्गत शब्दानुवाद, भावानुवाद, पूर्ण अनुवाद, आंशिक अनुवाद, लिप्यंतरण, रूपांतरण, छायानुवाद, और अनुवाद में कुछ जोड़ना–छोड़ना आदि पक्षों पर अपने व्यावहारिक अनुभव का उल्लेख शामिल होगा);
- अनुवाद कार्य में प्रयुक्त उपकरणों (अर्थात आपने जिन कोशों का उपयोग किया हो, उन) का उल्लेख करना;
- (iii) पाठ में सांस्कृतिक और तकनीकी कठिनाइयाँ; और
- (iv) भाषिक और पाठपरक चुनौतियाँ आदि।

परियोजना कार्य का अनुवाद करने के दौरान आपने जिन बिंदुओं के आलोक में अलग से सामग्री नोट की है, उन्हें आप अपने मत–प्रस्तुति में इस अनुवादकीय टिप्पणी में उदाहरणों के रूप में भी उद्धृत करें। इससे आपकी अनुवादकीय टिप्पणी सटीक एवं प्रभावी सिद्ध होगी।

कृपया ध्यान दें : अनुवाद परियोजना के साथ आपको अपने शब्दों में अनुवादकीय टिप्पणी भी लिखकर एक—साथ भेजनी होगी। यदि आप परियोजना कार्य के साथ ही यह अनुवादकीय टिप्पणी भी जमा नहीं कराएँगे तो मूल्यांकन के लिए आपकी परियोजना स्वीकार नहीं की जाएगी।

अनुवाद परियोजना की प्रस्तुति

- अनुवाद परियोजना एवं अनुवादकीय टिप्पणी फुलस्केप आकार के कागज पर पर्याप्त हाशिया छोड़ते हुए एक तरफ हाथ से लिख कर प्रस्तुत करें।
- अगर हस्तलिखित अनूदित परियोजना एवं अनुवादकीय टिप्पणी प्रस्तुत करना संभव न हो, तो आप उसे टंकित कराकर और बाइडिंग कराकर प्रस्तुत करें। कृपया ध्यान दें कि टंकित प्रति की फोटोकॉपी स्वीकार नहीं की जाएगी।
- अनुवाद परियोजना जमा कराने से पहले यह अवश्य जाँच लें कि टंकित प्रति में वर्तनी / टंकण संबंधी अशुद्धियाँ न हों। अशुद्धियों के कारण आपके अनुवाद परियोजना कार्य का समुचित मूल्यांकन होने में कठिनाई होगी।
- अनूदित परियोजना के आरंभिक पृष्ठ पर आपके इस कार्यक्रम का शीर्षक, पाठ्यक्रम कोड और शीर्शक, नामांकन संख्या, नाम, पता, अध्ययन केंद्र का कोड लिखा होना चाहिए और अंत में आपके हस्ताक्षर एवं प्रस्तुति की तिथि का उल्लेख होना चाहिए। इस तरह, आपकी 'अनुवाद परियोजना' का आरंभिक पृष्ठ इस प्रकार होगा :

कार्यक्रम का शीर्षक	:	अनुवाद में स्नातकोत्तर डिप्लोमा (पी.जी.डी.टी.)
पाठ्यक्रम कोड	:	पी.जी.डी.टी.—05
पाठ्यक्रम का शीर्षक	:	अनुवाद परियोजना
अध्ययन केंद्र का नाम	:	
नामांकन संख्या	:	
नाम	:	
पता	:	
	:	
हस्ताक्षर	:	
तिथि	:	

- अनुवाद परियोजना के साथ एक प्रमाण–पत्र अवश्य लगाएँ जिसमें आपके अपने हस्ताक्षर सहित यह प्रमाणित किया गया हो कि आपने यह अनुवाद और अनुवादकीय टिप्पणी लेखन कार्य स्वयं किया है और इसके लिए किसी व्यक्ति की सहायता नहीं ली गई है।
- अगर यह पाया जाता है कि आपने परियोजना कार्य स्वयं नहीं किया है या किसी अन्य विद्यार्थी के परियोजना कार्य की नकल की है तो विश्वविद्यालय के नियम के अनुसार आपके विरुद्ध आवश्यक कार्रवाई की जाएगी।
- कृपया ध्यान दें कि यह अनुवाद परियोजना कार्य अध्ययन केंद्र के किसी शैक्षिक परामर्शदाता के मार्गदर्शन में नहीं किया होना चाहिए। यह कार्य आपको स्वयं ही करना होगा। मूल्यांकन के लिए अंतिम रूप से तैयार की गई अनुवाद परियोजना को (अनुवादकीय टिप्पणी सहित) सीधे ही विश्वविद्यालय में निम्नलिखित पते पर व्यक्तिगत रूप से अथवा पंजीकृत डाक द्वारा भेजें :

कुलसचिव विद्यार्थी मूल्यांकन प्रभाग (SED) इंदिरा गांधी राश्ट्रीय मुक्त विश्वविद्यालय मैदान गढ़ी, नई दिल्ली–110068

अनुवाद परियोजना प्रस्तुत करने की अंतिम तिथि

- जनवरी 2020 में प्रवेश लेने वाले विद्यार्थियों के लिए : 30 नवंबर, 2020
- जुलाई 2020 में प्रवेश लेने वाले विद्यार्थियों के लिए : 31 मई, 2021

अंतिम तिथि के बाद और न्यूनतम अध्ययन अवधि में भेजी गई परियोजना का मूल्यांकन विलंब से होगा और आप इस अध्ययन कार्यक्रम को देर से पूरा कर सकेंगे।

अगर आप निर्धारित अंतिम तिथि के बाद और अपने अध्ययन कार्यक्रम की अधिकतम अवधि के दौरान 'अनुवाद परियोजना' (पी.जी.डी.टी–05) कार्य करते हैं तो ऐसी स्थिति में यह ध्यान रखें कि जिस वर्श में यह जमा कराएँ उसी वर्ष की 'अनुवाद परियोजना' ही करें। पुरानी अनुवाद परियोजना नए वर्ष में स्वीकार नहीं की जाती है। नई 'अनुवाद परियोजना' प्राप्त करने के लिए विवरणिका में दिए गए संबंधित प्रपत्र को भरकर अपने क्षेत्रीय केंद्र के क्षेत्रीय निदेशक अथवा सामग्री निर्माण एवं वितरण प्रभाग को भेजें। आप अद्यतन 'अनुवाद परियोजना' इग्नू की वेबसाइट (www.ignou.ac.in) से डाउनलोड भी कर सकते हैं।

कृपया ध्यान दें

प्रस्तुत की गई अनुवाद परियोजना की एक प्रति (फोटोकॉपी) अपने पास अवश्य रख लें।

शुभकामनाओं सहित।

CHAPTER-1 UNITY IN CULTURAL DIVERSITY

- 1.1 India is a Country of sub-continental proportion. From east to west and from north to south it spans over distances of 2,933 and 3,214 kilometres respectively. With a cumulative landmass of about 3,287 square kms, it encompasses almost every topographical feature found in the world. As far as the current size of the population is concerned, it ranks number two in the world. More than the size, the population map of India stands out because of its immense diversity. This diversity has been sustained over centuries largely because of the numerous traditions, practices and knowledge systems, which communities across the country have relentlessly nurtured and come to represent in myriad forms. The finest expressions of such traditions and practices are seen portrayed in languages and literature, food habits and cuisine, clothing and dress, fairs and festivals, arts and crafts, music, dance and drama, and architectural and sculptural styles. Besides, the diversity is also seen amplified in the everyday lives of the people. Both these strands, the classical and the folk, draw their life-force and inspiration as much from the elements of nature found in specific regions as from the continuous inter-mingling of peoples and their traditions across regions, giving rise to what we today fondly call the 'Indian Culture'.
- 1.2 Though culture comprises traditions, practices and knowledge systems, yet it is a dynamic entity. Societies remain alive and functional as long as they are able to adapt to changing circumstances and modify aspects of their cultures accordingly. At every stage of historical evolution, the country has only enriched its culture through greater interaction amongst various streams of people, assimilation by each of what was best of the other, with plenty of creativity amongst all, to attain synthesis. Similar trends are seen in our cultural endeavours in modern time, be it in the domain of films and other creative visual media, the domain of spectator sports or in the way we have come to refashion our national life around the celebration of certain National Days.

The Current Scenario

- 1.3 In this great national enterprise, each state and Union Territory (UT) of the Indian Union has contributed its fair share. From the days of the nationalist movement in the late 19th century CE, conscious efforts have been made by our national leadership, irrespective of the cultural and linguistic region or the political unit they belonged to, to make space for such voluntary contributions to pour in, so as to showcase the collective representation of India. Its first flash was seen in the early years of the 20th century CE in Bengal, when the first attempt was made by the then colonial administration to split people on religious lines. Boycotting what was foreign was not the only motto of the movement that followed this attempt. Nor was substituting the foreign with swadeshi, or what was of our own, a mere emotional indulgence. Its real objective was to reaffirm the fact that once upon a time India occupied a pride of place in the world for its crafts, industrial products, fine fabrics, exquisite jewellery, foods and beverages, standing as one people.
- 1.4 But, much as we may cherish what we have accomplished as a country thus far, this is again a moment when we must propel ourselves far more energetically in this direction. As per the 2011 census 35.3 percent of our population is below 14 years of age and nearly 41 percent below the age of 20 years. For this generation to effectively contribute to the process of nation building it is imperative that they bond and work with each other through enhanced understanding of cultures, traditions and practices of different States and UTs. One has also to bear in mind the fact that this is a generation that is seeking the best of education for itself while sharing an equally strong enthusiasm for mobility and career opportunities as no other generation did before.

The present Goals of Education and the Ek Bharat Shreshtha Bharat Initiative

1.5 As it is evident to all, culture and educations - one in the form of the lives that we live and the other which fosters rational understanding of phenomena and motivates one to apply its output in the form of knowledge in real life - cannot be divorced from one another. The *National Curriculum Framework (NCF)*, 2005 clearly recognizes thousand states how the aim of education should be about 'connecting curricular knowledge to life outside the school and nurturing an overriding identity informed by caring concerns (for diversity) within the democratic polity of the country'. It, therefore, behoves that we create material that children find useful and interesting to not only realize the goals of education as stated by the *NCF* 2005, but also to materialize the objectives of

Ek Bharat Shreshtha Bharat, an initiative announced by the Prime Minister of India on 31 October 2015 on the occasion of the 140th birth anniversary of Sardar Vallabhbhai Patel, the towering leader to whom the credit goes for unifying the Princely States with the Indian Union after Independence. These unexceptionable objectives seek to (i) celebrate the unity in diversity of our nation and to strengthen the fabric of traditionally existing emotional bonds between the people of our country, (ii) promote the spirit of national integration through a deep and structured engagement between all states and Union Territories through a year-long planned engagement between States, (iii) showcase the rich heritage and culture, customs and traditions of paired States for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity, (iv) establish long-term engagements, and (v) create an environment that promotes learning between states by sharing best practices and experiences.

- 1.6 With this understanding, the present Module tries to celebrate the spirit and form of India through the perspective of 'unity in diversity.' The 'unity' part reaffirms the conception of India as a united whole and recognizes that the strength of Indian culture lies in its assimilative outlook and synthesizing character. It does not need reiteration that the numerous 'little traditions' that one finds all across the country each rooted in its own specificity, have since time immemorial, been coalescing with each other to give rise to both the regional as well as the pan-Indian cultural traditions. Today, these pan-Indian or what the anthropologists prefer to call the 'greater traditions' can be seen shared and practiced across regions, confounding lay observers about their exact historicity or places of origin. What is more interesting is the fact that this tendency of 'sharing' to have a greater universal existence, while caring for the preservation of the distinctiveness of the individual traditions, has seamlessly allowed modernity to be culturally absorbed into the lives of the people making the Indian nation-state one of its kind in the whole world.
- 1.7 Similarly, the 'diversity' part, marking out the cultural specificities in State-wise profiles, draws our attention to the fact that India is a nation of incredible multiplicity, which lives naturally in its varied geographical surroundings. And, while doing so, it reiterates an inescapable truism. If there were no diversities, could there have been the joys of meeting, knowing, interacting and celebrating the life that we are so familiar with and frequently partake of? Without diversities, could it have been possible for the wise ones of yore to say 'what is not there in Bharat (India) is not there in the *Jagat* (World)'? Thus, these diversities are verily the pillars on which the edifice of Indian culture has been built over centuries and these indeed are the nuclei, which 'enable people to imbibe the innate chord of binding and brotherhood, make our people aware about the seamless integral hull of the modern Indian State, spread across a vast landmass on whose firm foundations the geo-political strength of the country is ensured to benefit one and all'.
- 1.8 From a purely educational perspective it will not be an exaggeration to say that in textual materials meant for transaction in classrooms one does not always find the cultural specificities of individual States and Union Territories mentioned to the extent one may like to have due to many unavoidable reasons. This often makes children coming from different parts of the country feel disheartened as they look for materials related to their States and UTs in those textbooks but fail to find them.
- 1.9 But, there are obvious complexities involved in this task. The first question that can be asked is about cultural specificities, which should or should not be included in a State or an UT profile. The second question, which follows it, is whether cultural specificities can be discussed without adequate reference to the geographical surrounding and historical experience of the concerned State or UT in such a profile. The third question pertains to the editorial concern of whether or not to allocate equal space to the profile of each State/UT in the Module and also whether or not to use uniform spellings for common sounding names for things like festivals, food items, clothes, etc.
- 1.10 Finding answers to these questions is not easy. However, the objective with which this Module is prepared makes it easier to limit each State/UT profile to a template that concerns itself with cultural specificities like language, food and dress, fairs and festivals, arts and crafts, and contemporary cultural developments. Naturally, these cultural specificities cannot be discussed without a reference to the natural environment of the States/UTs and the courses of their historical evolution. Therefore, the profile of each State/UT has begun with such a reference, though in a measured way so as to not overly digress from the cultural thrust of the profile. Similarly,

variations in the spellings of similar sounding terms have been preferred in place of bringing in uniformity to retain the flavor of diversity of this great country.

THE CULTURAL CONCEPTION OF INDIA

- 1.11 The unified geographical conception of India goes back to the time of the Vishnu Purana. However, the name Bharatavarsha, always present in the minds of the epic poets and philosophers, did not just signify a geographical entity but also presented an ideal before aspiring kings to bring the entire landmass stretching from the mighty Himalayas to the high seas under one political dispensation. Ever since, potential rulers have spared no effort to realize this ideal in practice. In ancient times the Mauryas and the Guptas fairly did it. In medieval times, the Sultans of Delhi and subsequently the Mughals, achieved great measures of success in doing so. The British, in modern times, surpassed those successes in building a pan-Indian empire. However, it was only after the country won its Independence on 15 August 1947 that this ideal has been justly realized within a democratic framework.
- 1.12 But the poetic vision of unity of the epic times was neither overly political nor limited to imperialistic aspirations alone. As it is, the enormous geographical spread of the country and within it the great degree of physical diversity had to be reckoned with. To add to that, the diversity in the people of the sub-continent, representing every ethnic variety and living condition, could not just be ignored or obliterated. The snowy mountains (the Himalayas), arid deserts (the Thar or the Great Indian Desert in the States of Rajasthan, Gujarat, Punjab and Haryana), impenetrable forest (the Chhotanagpur Plateau and the North-East), vast stretches of rocky table lands (the Deccan Plateau) were not easy to access. The valleys of the snow-fed rivers in the north (Sindhu, Ganga, Yamuna and Brahmaputra) and those of the rain-fed ones in the south (Narmada, Godavari, Tapti, Mahanadi Krishna, Kaveri, Periyar) created their own ecosystems for habitation and propagation of distinctive lifestyles. The vast stretches of coastal plains (Kutch, Konkan, Karnataka, Malabar, Coromandel, Andhra, Odisha) cordoned off by chains of thickly forested hills in the western (Western Ghats) and the eastern (Eastern Ghats) parts of the peninsula, likewise offered diverse cultures. In short, these exclusive topographical features created the necessary conditions that were conducive for the social, economic and political autonomy of people and states across the country.
- 1.13 Throughout the history of India the aspiring empire-builders always recognized this and accordingly devised political strategies by which they respected the autonomous existence of states when it was due and annexed peoples and territories with their own where it was feasible. This was seen in the case of the Mauryas while dealing with the *atavika rajyas*, the Mughals while dealing with the states of Rajputana, and the British while dealing with the Princely States of India through the policy of 'subsidiary alliance'. In independent India, similar tradition continues by way of having special provisions for certain States and certain sections of the population (Scheduled Tribes, Scheduled Castes, Other backward Castes, and Minorities) in the Constitution of India.
- 1.14 The basis for the realization of the unifying visions of the epic poets could be found in the domains of culture and in the kindred humane impulses of the peoples of India.

The Ancient Roots of India's Cultural Unity

- 1.15 This 'underlying uniformity of life' is not of recent origin. Nor is it a modern construct born out of the introduction of English education, a uniform system of legal and civilian administration, modern means of transport and communication like the railways, and the willful suppression of popular resistance movements and dissensions under the colonial rule as it is often alluded to.
- 1.16 As already mentioned, the visionary poets from the very beginning were fully conscious of the geographical unity of the country and their words had a natural resonance in the popular consciousness. The ready reckoning and acceptance of the aphorisms of the Vedas, the philosophical postulations of the Upanishads revolving around the concepts of the Brahman (the universal soul) and the Atman (the individual soul), the teachings of the Bhagavad-Gita elucidating the ideals of the 'Karma Yoga' (the path of action), the 'Bhakti Yoga' (the path of devotion), and the 'Jnana Yoga' (the path of knowledge) for self-realisation, and the laws of the smritis (legal treatises attributed to sages like Brihaspati, Yajnavalkya, Gautama, Vasishtha, Bodhayana, and Apastamba) by the people across the country, affirms this.

- 1.17 The Puranas immensely popularized the abstract spiritual and ethical truths contained in these sacred texts in the most intelligible manner that was possible. They did so with concrete examples from the lives of illustrious sages, saints, kings, and also lay devotees. Attributed to the Age of the Epics, these poetical works took little time and effort to mould public life for thousands of years to come. The Puranas also transformed the Vedic divinities into easily approachable personal Gods like Brahma, Vishnu and Shiva thereby making the paths of knowledge, action and devotion easier for the people to appreciate and practice in their own inimitable ways. Its consequent impact could be seen in the budding literary traditions of different regions in the country.
- 1.18 Similarly, epics like the Ramayana and the Mahabharata became universal in their appeals and acceptance among the peoples of all ethnicities and pre dispositions because of their inherent assimilative character. Consequently, as cultural traditions started flowering in different regions of the country, the stories of Rama and Sita and that of the Kauravas and the Pandavas became some of their principal themes. Even today it is difficult to find a place in any part of the country, where a local legend or a monument is not characteristically linked to these stories.
- 1.19 Besides, belief systems can also be seen today that revolve around the ideas of *satya* (the principal of truth), *dharma* (the laws of ethical and moral stability), *karma* (the laws of action connected to the concept of the transmigration of soul), *ahimsa* (the principle of non-violence), *daana* (the principles of charity), *punya* (the principles of earning religious merit), *tapas* (the principles of austerities and penances), and *moksha* (the principles of attaining liberation for the individual soul from the cycle of birth and death) being followed by peoples of all walks of life across the length and breadth of the country despite there being multiple differences amongst them in the interpretations of these ideas.
- 1.20 Over the centuries streams of people have come to his country as adventures, traders, mendicants, missionaries, travellers, conquerors, scholars, refugees, each with their own baggage of customs and traditions. But none of them has gone back or stayed in this country without being influenced or touched by at least some or all of these ideas. Naturally, as it happens in most such cases of cultural meeting points, initially there must have been fierce debates, discords and even conflicts. However, there was an inherent capacity in India to absorb such discords intellectually and contribute to the progressive development of all its peoples towards higher truth and self-realisation. Over centuries, this intellectual capacity has come to be represented by the six systems of philosophy, which still guide scholarly discourses in this country.
- 1.21 The orthodox ways of approaching and realizing truth based on the acceptance of the Vedas as the fountains of all knowledge, and hence infallible by the aforesaid scriptural and philosophical traditions, faced a serious challenge with the emergence of the thirty-six heterodox sects during the 1st millennium BCE. The principal among those sects were Jainism and Buddhism, the first led by Vardhamana Mahavira and the other by Gautama the Buddha. They propounded views of life that were outside the ambit of faith and devotion. Nonetheless, as time rolled on, a spiritual synthesis out of this challenge did come to fore giving expression to what we may call a characteristically Indian variety of religiosity. Making stupas, chaityas and viharas, building cave shrines and monolithic temples, sculpting and worshipping mages, painting murals on cave, temple and palace walls, and organizing religious congregations and festivals became the defining features of this religiosity. Typically, people of all sects and religious persuasions adapted these features and practiced in their own celebratory ways.
- 1.22 The setting up of the four Maths (also spelled is mutt) in the four directions of the country during the 1st millennium CE by Adi Shankara or Shankarcharya as he is popularly referred to in Indian tradition (the Jyotirmath at Badrinath in Uttarakhand in the north, the Sarada Saringeri in Karnataka in the south, the Sharada Math at Dwarka in Gujarat in the west. And the Govardhana Math at Puri in Odisha in the east) was also in a way, a part of this synthesizing effort. It enjoined upon all Hindus the sacred duty to visit these four tirthas (places of pilgrimage) at least once in their life time to earn the required punya (merit) for attaining mukshya (personal salvation). Similarly, the practice of invoking the names of the seven sacred cities (Ayodhya, Mathura, Maya/Haridwar, Kashi/Varanasi, Kanchi/Kanchipuram, Avantika/Ujjain and Dwaravati/Dwarka) and the seven sacred rivers (Ganga.Yamuna, Godavari, Saraswati, Narmada, Sindu and Kaveri)

during all auspicious occasions till this day continues to remind every Indian of not only the geographical vastness of the country but also its essential cultural unity.

Continuation of India's Unified Cultural Ethos through the Medieval and Modern Times

- 1.23 As India confronted parallel civilizations, coming first during the medieval times in the form of Islam from the Middle East and next during the modern times in the form of Christianity from the West, its responses were not vastly different. Through numerous social, religious and cultural reforms it vastly transformed Indian society on both the occasions to remain firmly entrenched in its inimitable synthesizing character as ever. The Bhakti and the Sufi movements in the medieval times and the renaissance movement in the 19th Century CE not only helped in the incorporation of whatever were good in Islam and Christianity into the Indian way of life, but also widened the scope for the infusion of a good measure of Indian ideas and practices into the Islamic and Christian traditions and belief system. It is therefore, not surprising to find so many places of interreligious amity and harmony in India today. Tombs of the sufi saints (dargahs), temples, churches and cathedrals offering spiritual solace to one and all come in this category. It may be interesting here to note that as people of all faiths flock to the Dargah of Khwaja Muinuddin Chisti at Ajmer in Rajasthan, it is Salabega who has been honoured with the epithet of bhaktakavi for his numerous compositions in the praise of Lord Jagannath at Puri in Odisha. Similarly, at Nagapattinam in Tamil Nadu, people of all faith flock to the Vailankanni Church to pray at the feet of the Holy Mother Mary for good health and peace.
- 1.24 Obviously, the Indians who came in close contact with the foreign ruling elites on both these occasions could not help but get influenced by their languages, food habits, styles of dressing and overall social mannerisms. Such impact could be seen prominently on the contemporary Indian ruling families throughout the 2nd millennium CE. But the opposite also happened in an inevitable way. In ancient times, foreigners such as the Indo-Greeks (Yavanas), the Perthians (Pahalvas), the Scythians (Sakas), the Yuechis (Kushanas), the Hunas (a Central Asian tribe) and several others had come to India with the aim of conquest, but in the process had got completely merged into the Indian cultural milieu without much trace of their individual identities. Although it did not happen in the same way on these occasions yet out of these encounters they gradually evolved distinctive Indian personality that we are so familiar with today.
- 1.25 The Indian converts into Islam and Christianity, of course, could not give up their inherited customs for sociological reasons. The use of sindur (vermillion) on forehead, bangles on wrists and the observance of so many other little traditions were testimonies of this fact. Many of them even continued with their previous surnames. But the process did not stop there. Beginning with Ghiyas-ud-din Balban in the 13th century CE, the sultans of Delhi started adopting many features that were associated with the courts of the Indian Rajas. In this enterprise, the members of the nobility, who came from outside into India in those days, did not lag far behind. Many of them found it quite useful to adopt the Indian habits of maintaining personal hygiene and the ways of going about life in social and aristocratic circles. This was perfected to such an extent that by the time Babur appeared on the Indian political scene in the 16th century CE, he found 'everything in Hindustan in the Hindustani way'.
- 1.26 In certain regions of India the process were much further. In Jammu and Kashmir, Zain-ul Abidin, popularly known as 'Badshah' (the Great King), initiated the practice of visiting the shrines of Lord Shiva at Amarnath and Devi Sharada in the Neelam valley (Now in Pakistan-Occupied Kashmir). In Bengal, Husain Shah gave encouragement to the worship of Satya Pir/Satya Narayana, a tradition where the Muslims and the Hindus shared faith in a commonly acceptable divinity with varying names. Besides, the sufis also adopted a number of practices which were not very far from the practices that were associated with the bhakti traditions. Worshipping relics (Mu-e-Mubarak) of the Prophet and his foot-prints (Qadam-e-Rasul) were some such practices. Among others, celebrating Basant Panchami and removing the ill-effects of the evil eye by performing arti too became parts of the sufi tradition. All such developments made people find a lot of similarity in both the movements, which helped in bridging the distances between the two communities. On their parts, the Bhakti saints (Ramananda, Kabir, Guru Nanak, Sri Chaitanya, Mirabai, Shankara Deva, Namdev, Tukaram, Narsinh Mehta) also brought communities closer by tying them together

through the common thread of devotion and removing from their eyes the veils of bigotry and differentiation though languages and imageries that were quite easily intelligible to them.

- 1.27 In the modern times a partially different process of building the Indian cultural persona came to be seen. Until then the main principle of governance had been to not only recognize the existence of an infinite variety of religious beliefs and social customs among the governed but also to defer to their continued practice unless warranted otherwise in an exceptional circumstance. But the situation underwent a complete change as India turned into a colony during the 18th century CE. It not only led to the wholesale political subjugation and economic exploitation of the country at the hands of the British, but also opened the floodgates for indiscriminate westernization of the Indian society and its culture. The introduction of western education through the English medium and its systematic promotion at all levels facilitated this process in an unprecedented manner. The proactive politics of the Christian missionaries to propagate their faith through providing western education, which had become remarkably essential to find any livelihood opportunity and thereby earn some standing in social life in the new environment, enormously contributed to this process. As The Gazetteer of India (Volume Two) succinctly put it: "Between the missionaries and the educationists, there was always the conflict whether conversion would bring progress and broader outlook or that education would lead Indians to Christianity." At the end it was the missionaries who did much of the pioneering work in almost every field of education thereby impacting not only the policies of the colonial government of the time but also the larger Indian society. Another factor that also impacted the lives of the Indian people was the way in which the Sahibs or the British people lived in India. That it had a visible bearing actually comes to us from William Bentinck, who after coming to Bengal as the Governor General noted with satisfaction as to how the Indians in the cities of this Presidency were "spending their money not on ceremonies and religious rites alone but more and more on entertaining the British and entertaining like the British". The directness with which the British also introduced social reforms like the banning of 'slavery' (beginning with a proclamation by Cornwallis against the sale and purchase of children of both sexes by the Portuguese, the Dutch, the French and the Arabs in 1789), the abolition of pernicious practices like 'female infanticide' (as early as 1795 CE in Bengal and thereafter in other Presidencies), sati or the self-immolation of the widow on the funeral pyre of the dead husband (through Regulation XVII of December 4, 1829) and 'child marriage' (beginning with the Act of 1860 that dealt with the age of consent and consummation), the removal of caste-based discrimination in the Hindu society (through the Caste Disabilities Removal Act of 1850), and the encouragement given to 'widow remarriage' (through the Hindu Widow's Remarriage Act passed in 1856) also had a substantial transforming impact on the Indian society. In the immediate instance, it spurred the progressive elements of the Indian society, who steadfastly confronted orthodoxy of all kinds and led to the dawning of a new India.
- 1.28 However, alongside these impacts there also came into play a 'national outlook', which was hardly foreseen by the British. Contrary to Macaulay's ideas, who expected to create 'a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect', the introduction of western education in India, as the Gazetteer (cited above) states, actually freed the Indian mind from the "thralldom of old-world ideas" and initiated a renaissance in Indian life. It led to a sincere study of India's cultural heritage and the rediscovery of its impressive past. Besides, it also led to the enrichment of modern Indian languages and the foregrounding of the humanistic trends in regional literatures, which once again brought people closer to each other. In this process the contributions of some enthusiastic western scholars and administrators like William Jones, Charles Wilkins, Monier Williams, John Marshall, and Henry Thomas Colebrooke, to name a few, was no less significant. In fact, it was a tribute to the age-old syncretic tradition of India that these scholars and administrators began deeply appreciating the philosophical as well as the temporal aspects of Indian culture even as the British gradually settled down to administer India with an iron grip. As historian Manmatha Nath Das writes: "When the young Indians read in their schools and colleges that a Buddha was the light of Asia, a Chandragupta Maurya had defeated the Greeks or that an Asoka was the greatest monarch in human history, they felt proud of their country". Similarly, the aggressive condemnation of the religious practices, culture and society of India and especially that of Hinduism by the Christian missionaries coupled with their proselytizing activities laid the foundation for the regeneration of the Indian religions and

philosophies. The organisations which played the pioneering roles in doing so were the Brahmo Samaj, the Arya Samaj, the Prarthana Samaj, the Ramakrishna Mission the Theosophical Society, the Servants of India Society, the Satya Shodhak Samaj, Sri Narayana Dharma Paripalana Yogam, the Rahanumai Mazdayasanan Sabha and the Aligarh School. On the political front also the Indians learnt from the British the value of organisation and then the importance of agitation. This spurred a national movement which ultimately brought freedom to the country.

- 1.29 Thus, out of these cross-currents, there has come into being a nation, which is modern and yet steeped in tradition. This is reflected across the social, political and economic systems of the country. As Professor A.L. Basham in his seminal work, Wonder That Was India, has quite perceptively stated, "Today there are a few Indians, whatever their creed, who do not look back with pride on their ancient culture, and there are a few intelligent Indians who are not willing to sacrifice some of its effete elements that India may develop and progress. Politically and economically, India faces many problems of great difficulty and no one can forecast her future with any certainty. But it is safe to predict that whatever that future may be, the Indians of coming generations will not be unconvincing and self-conscious copies of Europeans, but will be men rooted in their won traditions and aware of the continuity of their culture." So, even as we have adopted the parliamentary system of government from the British, we have nourished a political culture that is uniquely Indian in ethos and sensibilities. Similarly, the welfare orientation of the country's economy has allowed it to carry along the age-old economic relations that have sustained peoples and communities across the length and breadth of this country over the millennia. The same goes for the day-to-day life of the people in terms of the clothes they wear, the food they eat, the games they play, the languages they feel more comfortable with while communicating with each other, and above all, the way they conduct themselves in public.
- 1.30 These are but a few examples which illustrate the essential unity of Indian culture. There are many more such examples which the readers will find mentioned in the State-wise profiles given hereafter in this Module. Besides, a closer look at other facets of Indian culture will also throw additional light on the unifying characteristics of Indian culture.

UNITY IN CULTURAL DIVERSITY

- 1.31 Language is a major marker that shows the bewildering diversity which has always existed in India. Going by the 2011 census there are as many as 122 languages and 234 mother tongues in the country with over 10,000 people speaking each of these languages. According to a 2013 study conducted by the Peoples Linguistic Survey of India, there are not less than 780 languages in the country as of now. In the past there might have been many more languages. But, whatever the number of languages may be, there is no denying the fact that people in this vast country have always found in one or the other language, the overarching means of communicating with each other and to shape the country's greater cultural identity. Literary works composed in Sanskrit, Pali, Prakrit and Tamil in ancient times connected vast number of people across the country. Then, alongside these languages, Persian and Arabic as the languages of the ruling class for over a period of more than five hundred years during the medieval times also contributed to the process of connecting peoples and their cultures in diverse ways. The standardized Hindi and Urdu languages, which are spoken by vast number of people in India today, are a tribute to this creative process. Similarly, since its introduction as a language of administration and education under the British rule in the 19th century CE, English has been continuing to play the role of a link language in India. Besides, the language has also been given the status of a 'subsidiary official language' in the country under the existing constitutional and statutory provisions to facilitate inter-governmental communication. Apart from this, what also needs to be remembered is the fact that in India languages coexisting within one family have always been intrepidly influenced by the languages of another family. This can be seen from the way Sanskrit has influenced languages like Kannada, Telugu and Malayalam, which belong to the Dravidian group of languages. Further, it is also worth remembering that literature produced across languages in India has always exhibited a remarkable spirit of unity defying formidable vocal diversity over the millennia.
- 1.32 Similarly, despite a bewildering variety of forms and expression in all other spheres of culture, be it fairs and festivals, food and cuisine or arts and crafts, one can still find a sense of unity writ large across their conception, mood and spirit. This can be well judged from the way festivals like Makar

Sankranti, Holi, Baishakhi, Diwali and Dussehra are celebrated under different names in different parts of the country. This can also be judged from the way general norms for cooking food have come to be adhered to by people throughout the country. Today these traditions can be found well preserved in temples as-well as homes and popular restaurants alike. Furthermore, whether it is composing music or staging plays or building structures, one finds in all such activities an underlying observance across the country of principles that are laid down in classical treatises emphasizing on the aspect of conceptional unity amidst diversity of forms. A testimony to it can be seen in the recital of the Hindustani and the Carnatic styles of music, the performance of the Bharatanatyam, Kuchipudi, Kathakali, Odissi and Manipuri dance forms as well as the execution of the Nagara, Besara, Dravida and Kalinga styles of architecture as typical examples.

Contributing Factors for India's Unity in Cultural Diversity

- 1.33 Today, we can find several contributing factors for this unity amidst diversity. One such contributing factor is the organizational system of the Indian society. From the beginning it not only allowed a continuous process of social integration of people from diverse backgrounds but also provided them with the required space for social mobility and enjoyment of personal, domestic, religious and cultural freedom. As historian Radha Kumud Mookerji has pointed out, this ensured the continuity of the unitary character of the Indian society over a long period of time. Similarly, the emphasis laid by it from the beginning on linking of the local with the regional and the regional with the national through institutional frameworks like family, marriage and kinship widened the sphere of the 'Great Indian Society' to eventually encompass the whole country.
- 1.34 Sociological studies have shown variations in the Indian family structure depending on the marital, parent-child and sibling relations. However, there is no denying that over the centuries principles such as marrying outside one's immediate family circle, living in an undivided family, looking after the old and the young with care and affection, sharing family income for the welfare of all, celebrating festivals and observing family rituals together and carrying the family name have become the norms of the Indian family system imparting it a unitary character. Similarly, the time-honoured Jajmani system, allowing social groups to remain tied to each other through exchange of services, goods and gifts, has also provided a unifying basis for the Indian society and culture to thrive. In fact, the 'sense of collectivism' which one finds in an Indian village is largely on account of the steadfast observance of this system. But for it the Indian society could not have overcome the tumultuous changes that it has gone through over its long history.
- 1.35 However, the process through which the Indian society could achieve all this was 'acculturation'. As a social process it allowed integration of many social groups into the larger fabric of the Indian society thereby shaping a broadly common pattern of life. As anthropologist McKim Marriott, while studying the village communities in India observed, this process allowed a two-way circulation of traditions, giving birth to the sum and substance of Indian culture-elements of 'little traditions' in the form of local customs, rites, rituals and deities circulating upwards to the level of the 'greater tradition' and getting identified with its well-recognized forms; elements of the 'greater tradition' circulating downwards to become organic parts of the 'little traditions' losing some of their original forms and meanings.

EPILOGUE

1.36 In India after Independence, urbanisation, industrialisation and agricultural revolution have greatly contributed to the integration of people from diverse backgrounds. Systems of mass transport and communication, modern medicine and health services, newer means of earning livelihood and transacting businesses, and easy access to mediums of mass information and entertainment have immensely facilitated this process. The seamless continuum between the urban and the rural has also helped in bringing the country far closer than ever before. To add to these, the achievements of the country in recent years in the fields of science and technology, institutional transformations and economic reforms, foreign policy, sports and games, and overall human development have once again generated a sense of nationhood that undeniably reflects the all-time poetic vision of India's fundamental unity amidst myriad diversity.

CHAPTER-2 POWER FROM RENEWABLES RESOURCES

- 2.1 The focus of this Ministry has been to promote the development and deployment of various technologies for increasing the installed capacity of grid interactive and off-grid renewable power. The government has been offering a number of fiscal and financial incentives to investors in increasing the penetration of renewable power in the energy and electricity mix of the country. India's renewable energy installed capacity has grown from 3.9GW in 2002-03 to about 27.3GW in 2012. Wind energy has been the predominant contributor to this growth. It also accounts for 68% of the installed capacity, followed by small hydro power, biomass power; and solar power.
- 2.2 Wind energy has been used successfully in India and is the fastest growing renewable energy technology for generating grid connected power amongst various renewable energy sources. The Ministry's wind power programme covers survey and assessment of wind resources, facilitation of implementation of demonstration and private sector projects through various fiscal and promotional policies. A total capacity of 18,420 MW has been established up to December 2012 in the country. India is now the fifth largest wind power producer in the world, after China, USA, Germany, and Spain.
- 2.3 As per the Indian Wind Atlas, the on-shore wind power potential has been estimated as 49,130 MW at 50m height. On a conservative consideration, a fraction of 2% land availability for all states except Himalayan states, Northeastern states and Andaman & Nicobar Islands has been assumed for potential estimation. In Himalayan states, North-eastern states and Andaman & Nicobar Islands, it is assumed as 0.5%. However, the potential would change as per the real land availability in each state.
- 2.4 The Wind Resource Assessment (WRA) Programme is an ongoing activity, which is being implemented by the centre for Wind Energy Technology (C-WET), Chennai in association with State Nodal Agencies. WRA has so far covered 31 States and Union Territories involving establishment of about 696 automated wind monitoring stations. 92 wind monitoring station were under operation. 35 new wind monitoring stations have been commissioned in various States.
- 2.5 The aim of the Indian Wind Atlas is to establish the meteorological basis for the assessment of wind energy resources all over India. The main objective is to provide appropriate wind data for evaluating the potential of wind power output from large electricity-producing wind turbine installations. In addition, the Wind Atlas gives some guidelines for the application of the data herein.
- 2.6 Indian Wind Atlas has two parts (a) Numerical Wind Atlas i.e. Wind atlas in digital form. This Atlas represents wind climatology for every 5 km of the country for five different heights. These details give wind characteristics for different geography and at 5 different height levels for every 5 km x 5 km in the country. (b) Indian Wind Atlas in a book form. Both these outcomes of Indian Wind Atlas are made available for public at a reasonable cost. This can be used for prospecting and finally identifying potential sites for Wind farming.
- 2.7 The Ministry supports the R&D projects through C-WET for in-house R&D projects and also through research institutions, national laboratories, universities and industries. Some of the on-going R&D projects are in the area of power quality issues in grid connected wind farms and identification of remedial measures; Power evacuation studies for grid integrated wind energy conversion system and development of small wind turbines.
- 2.8 C-WET's Wind Turbine Test Station (WITS) near Kayathar in Tamil Nadu was established with the technical assistance of RISO National Laboratory, Denmark under Danish International Development Agency (DANIDA) grant and with partial financial assistance and guidance from the Ministry. Testing assignment for three wind turbines has been signed during the year.
- 2.9 C-WET has completed the renewal of Provisional Type Certificates of two wind turbine models during the year. The formulation of Indian Standards on wind turbines is under progress, in close co-ordination with Bureau of Indian Standards. During the year new guidelines were issued for

promotion of new prototype wind turbine models in India. One such model was given clearance to be installed as prototype during the year.

- 2.10 A wind power capacity of 1067 MW has been added during 2012-13 up to December, 2011 taking the cumulative installed capacity to 18420 MW mainly in Tamil Nadu, Gujarat, Maharashtra, Madhya Pradesh, Kerala, Karnataka and Rajasthan. It is expected that growth in wind energy generating capacity in the country will decline significantly in current year. Based on the reports received in the Ministry, the generation from wind power projects during the years was around 20 billion units. The cumulative generation from wind power projects in the country crossed 138 billion units of energy up to November, 2012.
- 2.11 Wind turbines are being manufactured by 18 manufacturers in the country with 44 models ranging from unit size from 250-2500 KW, mainly through joint ventures or under licensed production agreements. Four new models were introduced during the year. A few foreign companies have also up their subsidiaries in India while some companies are now manufacturing wind turbines without any foreign collaboration. The technology is continuously upgraded, keeping in view global developments in the area.
- 2.12 A package of incentives which include fiscal concessions such as, concessional custom duty for specific critical components, excise duty exemption, income tax exemption on profits for power generation, etc. are available for wind power projects. The State Electricity Regulatory Commissions (SERCs) in Andhra Pradesh, Haryana, Punjab, Madhya Pradesh, Maharashtra, Rajasthan Tamil Nadu, Gujarat, Kerala, Punjab, Odisha and West Bengal have announced preferential tariff for purchase of power from wind power projects. Many States have also announced renewable energy purchase obligations, which catalyses the growth in the wind power generation.
- 2.13 The Tamil Nadu State Electricity Regulatory Commission (TNERC), Gujarat State Electricity Regulatory Commission (GERC) and Andhra Pradesh State Electricity Regulatory Commission (APERC) issued the modified tariff rates during the year.
- 2.14 The Central Electricity Regulatory Commission (CERC) issued during the year the new guidelines for the tariff determination for all the renewable energy sources including wind energy. This will give further impetus to the development of the sector on its adoption by the state regulators as the new guidelines suggest very attractive tariff rates for renewable.
- 2.15 In order to enhance the investor base of Independent Power Producers (IPPs) and Foreign Direct Investment, who are not able to absorb the accelerated depreciation benefit, Ministry had announced a scheme on Generation Based Incentive for wind power projects. As per earlier Cabinet decision in 2009, the GBI was discontinued with effect from 2012. An independent assessment of the scheme was conducted by an external consultant, CRISIL, whose report was finalized during the year. Ministry put efforts to continue the GBI and AD benefits for entire 12th Plan period.
- 2.16 The Biomass Power Programme is implemented with the objective of harnessing the potential for grid quality power from biomass resources through various conversion technologies. Biomass materials used for power generation include bagasse, rice husk, straw, cotton stalk, coconut shells, soya husk, de-oiled cakes, coffee waste, jute wastes, groundnut shells, saw dust etc. The potential of biomass power could be increased substantially if linked with dedicated plantations on forest and non-forest degraded lands. The benefit from biomass includes widely available resources all over the country, generate direct and indirect income for the rural communities, generate employment in rural areas and net positive environmental benefits. The constraints are competitive uses of biomass as cattle feed and partly used by process and power industries leading to shortages or rise in the price of fuel for biomass power plant.
- 2.17 Biomass system provides the flexibility to generate power on a distributed basis and enables rapid capacity addition. Wide range of technology choices exists for development of KW ranges gasification based system to both small and large scale systems.
- 2.18 Biomass resources are abundantly available in the entire country. Studies sponsored by the Ministry have estimated that about 17000 MW of power can be generated from agro-residues

covering agricultural and forestry residues excluding energy plantation in waste land and bagasse available in sugar mills. The potential of power generation from biomass can be enhanced by improving the harvesting efficiency of agro-residues etc. and developing policy framework for energy plantations.

- 2.19 During the year 2012-13, the states of Gujarat, Punjab, Maharashtra and U.P. have taken a lead for installation of biomass power projects. In Punjab, two biomass power projects based on cotton stalks, juliflora have been commissioned. Eleven biomass based power projects of various capacities have been commissioned in the country during 2012-12.
- 2.20 The development of biomass based power generation projects is dependent on the availability of resources (biomass) and development status of biomass logistics and conversion. Market for some biomass like rice husk has matured and presently almost the entire quantity is consumed in industry and power plants. On the other hand, technology for straw and stalks is at the initial stage of development. First few projects based on straw and stalks have now been set up.
- 2.21 One of the success stories of modern India is the bagasse based cogeneration in the sugar mills. A Task Force appointed by the Ministry in 1993, estimated that if all the sugar mills were to adopt technically and economically optimum levels of cogeneration for extracting power from the bagasse produced by them, an additional 3500 MW could be generated. Based on present capacity of sugar mills, higher pressure/temperature configuration, the potential has been revalidated to 5000 MW of surplus power.
- 2.22 The initial bagasse cogeneration with 45 kg/sq.cm./440°C steam pressure were increased to 65kg/sq.cm/485°C based on a demonstration programme initiated by the Ministry during 1994. The industry has improvised these plant designs to increase the cycle parameters to 87 kg./cm2 and 515°C by 2004. Adopting these higher steam parameters resulted in additional power generation of about 5% over the 65 kg/sq.cm and 485°C cycle for the same quantum of fuel. After the commissioning of almost 35 such projects located in the States of Uttar Pradesh, Karnataka, Andhra Pradesh and Tamil Nadu, higher parameters of 105 kg./cm² and 520°C were adopted which gave additional power generation of about 6%?
- 2.23 During the year twenty five projects in Tamil Nadu, Maharashtra, Karnataka, Andhra Pradesh and Uttar Pradesh have been installed and commissioned. About 20 plants are under implementation in Karnataka, Tamil Nadu, Maharashtra and Uttar Pradesh. Investment in high efficiency co-generation technology has significantly improved viability of the sugar mills. The capacity addition during 2012-13 up to December, 2012 is 255 MW in Punjab, Maharashtra, Bihar, Karnataka, Tamil Nadu, taking the cumulative cogeneration capacity in the country to 2240 MW.
- 2.24 Due to barriers such as inability to raise equity and debt, delays in decision making and high risk/high investment proposals, co-operative sugar mills are unable to implement high efficiency cogeneration power plants for optimum power export. The Ministry has made focused efforts in this difficult sector. These include provision of higher quantum of capital grants for Co-operative sector, capacity building initiatives, promotion of BOOT model and continuous follow up with Co-operative/Public Sector sugar mills and stakeholders. These efforts have provided excellent results. During the year, seven co-operative sugar mills in Maharashtra with aggregate surplus power generating capacity of about 80 MW with pressure configuration varying from 45 to 110 kg/sq.cm have been provided financial assistance by the Ministry.
- 2.25 The Ministry has initiated last year, a new scheme on Build, Own, Operate, Transfer (BOOT) model cogeneration project in co-operative/public sector sugar mills. Two BOOT model cogeneration projects in co-operative sugar mills of Maharashtra with project configuration of 110 kg/sq. cm. pressure and 540°C temperature with aggregate capacity 80 MW (45 MW export during season) have been provided financial assistance. Out of this, one BOOT model cogeneration project has been commissioned during the year and is exporting 22 MW power to the grid. The sugar factory modernization carried out by the BOOT developer has resulted in energy saving and better efficiency with steam to cane ratio of 36%. The second BOOT model cogeneration project is under advanced stages of implementation and expected to be commissioned by March, 2012. The Ministry has also supported BOOT model cogeneration projects in 12 Co-operative/ Public sector

sugar mills in Tamil Nadu. The total installed capacity of all these projects is 183 MW (123 MW export during season). All these projects are under advanced stages of implementation.

- 2.26 Ministry has also initiated last year, a new scheme for providing Central Financial Assistance for boiler up-gradation of cogeneration project in co-operative sugar mills. These co-operative sugar mills in Maharashtra with aggregate capacity of 36 MW (20 MW export during season) were provided financial assistance. These projects are expected to be commissioned by March, 2012.
- 2.27 The promotion of biomass based power generation in the country is encouraged through conducive policy at the State and Central levels. Based on the information available 17 states have policies for development of biomass power while one state i.e. Rajasthan has an exclusive policy for promotion of biomass power announced in 2010 and continued till date. A package of fiscal concessions such as accelerated depreciation, concessional custom duty, excise duty exemption, income tax exemption on projects for power generation for 10 years and electricity duty exemption etc. are available to biomass power projects.
- 2.28 The major policy initiatives proposed includes support to biomass power producers on revision of current tariff, introduction of variable tariff component through weighted average of the cost of biomass resource used in the State, removal of control period, formulation of exclusive state biomass policy to promote the viability and growth of this sector. In the medium term such a policy could pave the way for promotion of dedicated energy plantations through appropriate waste land development programme in each district/taluk based on a suitable public-private partnership model or contract farming. Emphasis will also be laid on development of fuel value chain business model through fuel management companies and biomass depot system for harvesting, transportation, storage and supply of fuel to power plant, introduction of generation based incentive scheme for incentivizing efficiency in biomass power projects and encouragement be given for increasing the operating period of bagasse cogeneration project from 180-220 days to 300 plus days.
- 2.29 The Biogas Power Generation Programme (BPGP) is under implementation since 2005-06. Its main objective is to promote Biogas based Power Generation, especially in the small capacity range, based on the animal wastes and wastes from forestry, rural based industries (Agro/Food processing), kitchen wastes, etc.
- 2.30 Under BPGP, 327 projects with a total capacity of about 6.00 MW are under implementation in 16 States, of which 191 projects with a capacity of about 3 MW have been completed.
- 2.31 During the current year (till December, 2012), 23 Nos. of BPGP projects/biogas plants with 7065 cum capacity with capacity to generate 656 kW power have been completed.
- 2.32 The implementation of the programme is done through State Nodal Departments/ Agencies of the States/ UTs, KVIC, BDTC's and institutions.
- 2.33 Monitoring of the biogas power projects are done based on progress reports, as well as monitoring and through inspection visits by MNRE officers or an authorized agency of MNRE. The project developers extend all help required in monitoring of the projects.
- 2.34 The BPGP programme is being evaluated through an independent agency i.e. M/s APITCO, Hyderabad. The draft report of the study was received in Nov.2012. The observations made on the draft report are being incorporated in the Final Report, which is expected to be received soon.
- 2.35 In India, Hydro power projects up to capacity of 25 MW are classified as Small Hydro. Ministry of New and Renewable Energy has been vested with the responsibility of developing Small Hydro Power (SHP) projects. The estimated potential for power generation in the country from small/mini hydel projects is 19,749 MW from 6474 identified sites. Out of this potential, about 50% lies in the States of HP, Uttarakhand, and Arunachal Pradesh. In the plain region Maharashtra, Chhattisgarh, Karnataka and Kerala have sizeable potential. Focused attention is given towards these States through close interaction, monitoring of projects and reviewing policy environment to attract private sector investments. The Ministry has been providing Central Financial Assistance to State Governments and private sector to set up small / mini hydro projects. The Ministry is also giving support towards survey and investigation, preparation of DPRs, project monitoring and training through Alternate Hydro Energy Center (AHEC), IIT, Roorkee etc.

- 2.36 Small hydel projects normally do not encounter the problems associated with large hydel projects of deforestation and resettlement. The projects have potential to meet power requirements of remote and isolated areas. These factors make small hydel projects as one of the most attractive renewable source of grid quality power generation. 24 States of the country have policies in place towards private sector participation to set up SHP projects. The Ministry has taken a series of steps to promote development of SHP in a planned manner and improve reliability & quality of the projects. The Ministry is giving special emphasis to promote use of new and efficient designs of water mills for mechanical as well as electricity generation and setting up of micro hydel projects up to a capacity of 100 kW for remote village electrification.
- 2.37 The total installed capacity of small hydro projects, at the end of 11th Plan, was 3395 MW. This was achieved by adding a capacity of 1419 MW during 2007-2012. The 12th Plan target for small/ mini hydro is 2100 MW.
- 2.38 The current year target is 350 MW. During the year, SHP projects aggregating to a capacity of 100.83 MW (up to 31.12.2012) have been commissioned both in the commercial and state sectors while projects aggregating to about 150 MW more are expected to be completed by 31st March, 2012. A continuous and steady growth can be seen in the SHP sector. During the 9th Plan a capacity of 269 MW was added. This has increased to 536 MW during the 10th Plan and 1400 MW during the 11th Plan. The average capacity addition of 55 MW per year during the 9th Plan has increased to 280 MW per year during the 11th Plan. The average capacity addition of 55 MW per year during the 9th Plan has increased to 280 MW per year during the 11th Plan. The average capacity addition target of 350 MW per year has been fixed for the 12th Plan.
- 2.39 In cumulative terms 939 small Hydropower projects aggregating to 3,496 MW have been set-up in various parts of the country, of which 320 private sector SHP projects with a capacity of 1662 MW have been set up. In addition, 327 projects of 1250 MW are in various stages of implementation. The Ministry has supported 148 SHP Projects in the Government sector aggregating to 356 MW capacity in 23 States/ UTs. So far, 88 projects aggregating to a capacity of 187 MW have been commissioned and the other projects are at various stages of execution. This apart, the Ministry has supported 38 old projects in the Govt. sector for Renovation and Modernization.
- 2.40 During the year 2012, the Ministry completed the process of preparing its 12th Five Year Plan. A sub-group for small hydro was constituted with members drawn from all major potential States to draw the 12th Plan and Action Plan for faster exploitation of SHP potential in the country. The sub-group has suggested prudent practices to be adopted for faster growth of the sector, reducing the gestation period and ensure increased pace of implementation of the SHP projects.
- 2.41 The working group set up by the Ministry to review the existing information available on the potential of small hydro and to decide approach and methodology to assess state-wise small hydro potential in the country completed its activity. It was observed that the present information available about potential of small hydro in the country needs a relook as for the last 4-5 years, private developers are also identifying sites in States and are termed as self identified sites. There is change in potential at some of the sites after detailed investigation by the private developers. It is now estimated that there is a potential of about 20,000 MW of Small Hydro in the Country.
- 2.42 The Prime Minister had announced a package of Rs. 550 crore to electrify border villages of Arunachal Pradesh. Accordingly, a plan has been made to electrify 1483 un-electrified villages of all border districts of Arunachal Pradesh. While 425 villages are being electrified by completing 46 small hydro power projects, balance 1058 villages are being electrified from small/micro hydel projects and solar photovoltaic systems. The project is now in the final stages of implementation. Out of 1058 villages, 841 villages have been electrified. These include 523 villages, where all households have been provided with solar home lighting systems.
- 2.43 The Ministry is also implementing a project entitled 'Ladakh Renewable Energy Initiative' to minimize dependence on diesel in the Ladakh region and meet power requirement through local renewable sources. The project is being implemented in a time bound mode of three and a half years with a total cost of Rs.473 crore. The project envisages setting up of 30 small/mini hydel projects with an aggregate capacity of 22.8 MW at a cost of Rs.266 crore. The works of survey and DPR preparation on all the sites have been completed & implementation of 14 projects started.

- 2.44 The Ministry had close interactions with the State Governments,SHP developers and manufacturers of SHP equipment. The Ministry had stepped up its efforts towards close interaction with the States and project-wise monitoring of projects implemented both in public and private sector. Steps necessary for increasing pace of implementation of SHP projects, project-wise monitoring and capacity additions expected during next year and the 12th Plan were discussed with the States.
- 2.45 The Ministry is giving special emphasis to promote use of new designs of water mills for mechanical as well as electricity generation and setting up of micro hydel projects. Special programs are being developed with the states to take up area based approach and involve local organizations such as the Water Mills Associates, cooperative societies, registered NGOs, local bodies, and State Nodal Agencies. The Ministry has sanctioned support for 4200 water mills in 9 states. So far 2053 water mills have been setup. The Ministry has also sanctioned 28 micro hydel projects (up to 100 KW) under the new scheme announced.
- 2.46 Five training courses were organized by AHEC on design, performance evaluation, testing and other aspects of SHP stations and two training programmes on water mills. An international training course on Small Hydropower-Assessment and Development is being organized by AHEC IIT Roorkee for the developing countries. 31 Standards, manuals and guidelines for various aspects of small hydropower development have been finalized by AHEC through consultative process with the sponsorship of MNRE. A project to set up a small hydro hydraulic turbine R&D laboratory at AHEC with an objective of creating international level facilities for testing, design and R&D in the area of hydraulic turbines, hydro mechanical equipments, control and instrumentation of small hydro-electric power plants is under implementation.
- 2.47 Small wind energy systems including water pumping windmills, aero generators and wind-solar hybrid systems have been found to be useful for harnessing wind and solar energy in un-electrified areas or areas having intermittent electric supply. These systems can be set up in rural, semi urban/urban areas having annual average wind speed of about 15 kmph or above, at 20 m height. The wind-solar hybrid systems have been used very extensively in the state of Maharashtra. These systems consist of aero-generator(s) and photovoltaic panels of suitable capacity with charge controller, inverter and battery bank. These systems are capable of mutually supplementing power generation from wind and solar energy to offer a reliable and more cost effective electricity supply in decentralized mode. They are good for diesel abatement. The Ministry has been implementing a programme on "Small Wind Energy & Hybrid Systems" to promote these devices.
- 2.48 The wind-solar hybrid systems in the unit capacity range of 1-10 KW have been mostly installed in the states/UTs of Maharashtra followed by West Bengal, Gujarat, Karnataka, Tamil Nadu, Meghalaya, Sikkim, Goa and Tripura. These systems are found to be useful for small power requirement for domestic, institutional as well as community applications.
- 2.49 The programme is run in market mode with active involvement of manufacturers and beneficiaries. The manufactures of the small aerogenerators are getting their machines empanelled under the Centre for Wind Energy technology (C-WET)'s Type testing scheme as per the IEC standards. The testing facilities have been developed at C-WET test station at Koyathar in Tamil Nadu.
- 2.50 During the year systems having capacity of around 444 kW have been installed in the country. As per the existing scheme, the financial support is provided on reimbursement basis after commissioning and performance reporting of the projects for at least 3 months.
- 2.51 The consultant appointed to prepare Wind Resource Maps for N-E States including Sikkim, and Leh-Ladakh (including Kargil) completed the reports. The DPRs have been prepared for 41 sites in Arunachal Pradesh, Mizoram, Nagaland, Leh and Kargil.
- 2.52 The focus of the programme is to provide unmet demand of electricity for villages for lighting, water pumping and micro-enterprises. In addition, biomass gasifier systems are capable to replace/save conventional fuels such as coal, diesel, furnace oil etc. used for captive power and thermal applications in rice mills and other industries. Emphasis is also given for setting up of small biomass gasifier and combustion based power plants up to 2 MW capacities connected at the tail end of grid as it provides multiple benefits such as reducing T&D losses, ensuring sustainable supply of biomass, access to electricity in villages etc.

अध्याय—3 अनुवाद का बढ़ता बाजार

- 3.1 भूमंडलीकरण के आज के दौर में बाजारवादी व्यवस्था ने 'उपभोक्ता' को केंद्र में लाकर 'कंज्यूमर इज़ किंग' बना दिया है। इस व्यवस्था ने विभिन्न देशों के बीच उत्पादों को खरीदने–बेचने या फिर सेवाएँ देने–लेने की सुविधा पहले की तुलना में ज्यादा बढ़ा दी और सरल भी कर दी है। इस व्यवस्था को विस्तार देने में कंप्यूटर–इंटरनेट जैसी सूचना प्रौद्योगिकी अपनी केंद्रीय भूमिका निभा रही है। लेकिन सबसे बड़ी बात यह है कि उत्पादों और सेवाओं की गुणवत्ता ही इस बाजार को व्यापक और स्थायी बना रही है। जरूरत सिर्फ गुणवत्ता के बल पर बाजार में टिके रह पाने की है। और यह तब तक संभव नहीं, जब तक कि वह भाषा के साथ सार्थक रूप से न जडे।
- 3.2 भाषा और बाजार एक-दूसरे को प्रभावित करते हैं। भाषा का बाजार के साथ नया और अनिवार्य संबंध अनुवाद के माध्यम से ही संभव हो पा रहा है। उत्पाद की जानकारी देनी हो, उसका प्रचार-प्रसार करना या फिर किसी भी प्रकार की आउटसोर्स सहायता-सेवाओं का लेन-देन ही क्यों न हो, यह सब भाषा के बिना संभव नहीं। यह स्थानीयता की सीमाएँ लाँघकर यह प्रदेश ही नहीं, विदेशों तक भी चला जाता है। बाजार को सही दिशा में विस्तार तब मिल पाता है जब वह भाषा की बाधा को पार पाने के लिए अनुवाद को माध्यम बनाता है। एक से अधिक भाषा-क्षेत्रों में कारोबार के सार्थक तरीके से फैलाव में अनुवाद की अनिवार्य रूप से जरूरत होती है। आम लोगों तक पहुँचने के अपने लक्ष्य को सामने रखकर चलने वाली बाजारीवादी व्यवस्था, खुद में कोई भाषा-प्रेमी व्यवस्था नहीं है। वह तो अपने उत्पाद आदि को खपाने और बाजार पर कब्जा करने का उद्देश्य लेकर चलती है। इसलिए उसे दूसरे की भाषा के साथ जुड़ने और उसे अपनाने में कोई गुरेज नहीं है। भले ही वह उत्पादक कोरियाई हो, चीनी हो, जापानी हो, भारतीय हो या फिर किसी भी अन्य देश का। इसके लिए, उत्पादक सबसे ज्यादा विज्ञापनों और अन्य प्रचार सामग्री का सहारा लेकर उपभोक्ता तक पहुँचता है, जिसमें वह अनुवाद को शरियाई हो, चीनी हो, जापानी हो, भारतीय हो या फिर किसी भी अन्य देश का। इसके लिए, उत्पादक सबसे ज्यादा विज्ञापनों और अन्य प्रचार सामग्री का सहारा लेकर उपभोक्ता तक पहुँचता है, जिसमें वह अनुवाद को शर्स्व बनाता है।
- 3.3 एक से अधिक भाषा—भाषी क्षेत्रों के बाजार तक पहुँच बनाने के कारण अनुवाद की आवश्यकता सिर्फ आधुनिक समय की जरूरत नहीं है। प्राचीनकाल में भी इसकी जरूरत होती थी, जब व्यवसायी अपने क्षेत्र के अलावा अन्य इलाकों में अपना कामकाज शुरू करते थे। वैसे तो अनुवाद का आरंभ तभी से हो गया होगा जब दो अलग—अलग भाषा—भाषियों में किसी प्रकार का संपर्क और संवाद स्थापित हुआ होगा। यह संवाद मौलिक अथवा लिखित, किसी भी स्तर पर संभव है। इसीलिए अनुवाद का मौखिक एवं लिखित रूपों में अस्तित्व प्राचीनकाल से ही माना जा सकता है। आधुनिक समय में इसका विस्तार बहुत ज्यादा मुखर रूप में सामने आ रहा है।
- 3.4 परस्पर संवाद या बातचीत के स्तर पर जाने–अनजाने या फिर औपचारिक या अनौपचारिक रूप से एक भाषा से दूसरी भाषा में अंतरण किया जाता है। तात्विक दृष्टि से इसे 'मौखिक अनुवाद' ही कहा जाएगा। वास्तविकता यह है कि 'मौखिक अनुवाद', अनुवाद का सबसे बड़ा क्षेत्र है। बातचीत के दौरान हम अनौपचारिक रूप से बड़ी सहजता से और अनायास अनुवाद कर रहे होते हैं कि हमें इसका आभास तक नहीं होता। लेकिन जब यही प्रयास किसी भी देश के वी.आई.पी., राजनयिक आदि के दूसरे देश में जाने पर दुभाषियों यानी इंटरप्रेटरों की सहायता से किया जाता है तो वह अनुवाद का औपचारिक रूप से बड़ी मंत्रजता से और अनायास अनुवाद कर रहे होते हैं कि हमें इसका आभास तक नहीं होता। लेकिन जब यही प्रयास किसी भी देश के वी.आई.पी., राजनयिक आदि के दूसरे देश में जाने पर दुभाषियों यानी इंटरप्रेटरों की सहायता से किया जाता है तो वह अनुवाद का औपचारिक रूप धारण कर लेता है। वैश्विक बाजारवादी व्यवस्था ने इंटरप्रेटरों की सेवाओं में बहुत बड़े पैमाने पर इजाफा किया है। इसमें कोई संदेह नहीं कि अंतरराष्ट्रीय स्तर पर आपसी संबंधों को बनाने–मजबूत करने में अनुवाद एक अनिवार्य आवश्यकता है। इसके अलावा, इंटरप्रेटशन के रूप में मौखिक अनुवाद संबंधी यह कार्य राष्ट्रीय–अंतरराष्ट्रीय सम्मेलनों, संगोष्ठियों, संयुक्त राष्ट्र की सभाओं, भारतीय संसद आदि में भी किया जाता है। आधुनिक विकास के चलते कॉल सेंटरों जैसी अवधारणाओं का मूर्त हो पाना और कारगर तरीके से काम कर पाना मौखिक अनुवाद पर भी निर्भर करता है।
- 3.5 अगर हम लिखित अनुवाद के संदर्भ में ही देखें तो मानव जीवन–व्यवहार की किसी भी सामान्य गतिविधि से लेकर समस्त जीवन–संदर्भों में इसकी व्याप्ति नजर आती है। भारत जैसे बहुभाषिक समाज में तो यह अनिवार्य आवश्यकता है। हमारे जीवन–व्यवहार के प्रत्येक नए–पुराने क्षेत्र में अनुवाद का महत्व है। यही महत्व ही इसे विभिन्न क्षेत्रों तक व्यापक रूप से विस्तार प्रदान करता है। आज वाणिज्य–व्यापार, शासन–प्रशासन, न्यायपालिका, ज्ञान–विज्ञान, प्रौद्योगिकी, शिक्षा, पर्यटन, जनसंचार माध्यम, विज्ञापन, बैंक, बीमा आदि मानव जीवन के विभिन्न कार्य–क्षेत्रों में इसकी पैट बढ़ती जा रही है। भारत में राजभाषा संबंधी द्विभाषिक व्यवस्था के कारण शासन–प्रशासन, न्यायपालिका, ज्ञान–पि्रान, न्यायपालिका, बौक, बीमा आदि मानव जीवन के विभिन्न प्रशासन, न्यायपालिका, बार्य–क्षेत्रों में इसकी पैठ बढ़ती जा रही है। भारत में राजभाषा संबंधी द्विभाषिक व्यवस्था के कारण शासन–प्रशासन, न्यायपालिका, ज्ञान–पित्रान, न्यायपालिका, बीमा आदि मानव जीवन के विभिन्न कार्य–क्षेत्रों में इसकी पैठ बढ़ती जा रही है। भारत में राजभाषा संबंधी

क्षेत्रों और उसकी कार्य–प्रणाली में अनुवाद की अनिवार्य उपस्थिति बनी हुई है। मेट्रो रेल, अस्पताल, एयरपोर्ट आदि जैसी जन–सेवाएँ भी अनुवाद कर्म के बिना प्रभावी सिद्ध नहीं हो पातीं।

- 3.6 देश–विदेश के साथ सांस्कृतिक संबंध आदान–प्रदान के लिए अनुवाद की अपरिहार्य आवश्यकता है। यह किसी भी देश–समाज की संस्कृति–कला से साक्षात का माध्यम है। साहित्यिक आदान–प्रदान में भी यह अपनी विशिष्ट भूमिका निभाता है। बहुभाषिक देश–समाज में तो इसकी विशिष्ट भूमिका है। अनुवाद के कारण विभिन्न भाषाएँ एक–दूसरे के निकट आती हैं। सृजनात्मक साहित्य का अनुवाद, स्वयं में एक महत्वपूर्ण विषय है। इससे राष्ट्रीय साहित्य की अवधारणा मूर्त हो पाती है। अनुवाद के द्वारा तुलनात्मक साहित्य के अध्ययन में भी बड़ी मदद मिलती है। धर्म के प्रचार–प्रसार में तो अनुवाद का महत्वपूर्ण विषय है। इससे राष्ट्रीय साहित्य की अवधारणा मूर्त हो पाती है। अनुवाद के द्वारा तुलनात्मक साहित्य के अध्ययन में भी बड़ी मदद मिलती है। धर्म के प्रचार–प्रसार में तो अनुवाद का महत्व निर्विवाद है, जो धार्मिक साहित्य के अनुवाद से संभव हो पाता है। वस्तुस्थिति यह है कि आज अनुवाद भी बाजारोन्मुखी होता जा रहा है। बाजार को ध्यान में रखते हुए अनुवाद कार्य, एक राजनीति के तहत भी हो रहे हैं ताकि उपयोग के साथ–साथ चिंतन जगत में भी अपने यहाँ के विमर्शों का विस्तार हो। इतिहास साक्षी है कि साम्यवाद–मार्क्सवाद के विस्तार में अनुवाद की अपनी यहाँ के जप में व्यवहार जगत में अनुवाद नए–नए क्षेत्रों तक विस्तार पाता जा रहा है।
- 3.7 वाणिज्य–व्यापार के क्षेत्र में सूचना और संचार की अत्याधुनिक प्रौद्योगिकी के प्रयोग की जीवन–रेखा बन रही 'ग्राहक सेवाओं' (कस्टमर केयर सर्विसिज) के नए आयाम, अनुवाद के रथ पर सवार होकर फल–फूल रहे हैं। मेलिंग, टेलीफोनी और लाइव सपोर्ट सिस्टम आदि के द्वारा प्रदान की जा रही ग्राहक सेवाओं में भाषा के जो अनेक स्तर उपलब्ध कराए जा रहे हैं, वे अनुवाद के जरिए मूर्त हो पा रहे हैं। ऑनलाइन विपणन जैसा आधुनिक बाजार, ग्राहकों से उनकी भाषा के माध्यम से नए ढंग से जुड़कर व्यवहार करने में विश्वास करता है। और, ग्राहकों की भाषा विभिन्नता की स्थिति में अनुवाद सशक्त माध्यम का काम करता है। वास्तव में, भाषा का नए साधनों के माध्यम से और नए ढंग से जुड़ाव का यह रूप अनुवाद–आश्रित होता है। इसमें अनुवाद नया रूप धारण कर रहा है, जहाँ विषय का सीधे मर्म पकड़कर और समझकर दूसरी भाषा के कलेवर में व्याहारिक धरातल पर उतरता है।
- अनुवाद की दुष्टि से जनसंचार माध्यम एक महत्वपूर्ण क्षेत्र है। इसके अंतर्गत प्रिंट और इलेक्ट्रॉनिक माध्यम 3.8 तो आते ही हैं, कंप्यूटर और सोशल मीडिया आदि जैसे नव–इलेक्ट्रॉनिक भी आते हैं। जनसंचार माध्यमों में अनुवाद की अनिवार्य भूमिका और महत्व है। नव–इलेक्ट्रॉनिक माध्यमों ने कंप्यूटर अनुवाद जैसे 'अनुवाद के नवीनतम क्षेत्र' को हमारे सामने उभार कर रख दिया है। जन-सामान्य तक गूगल आदि के द्वारा इसे व्यवहार में ला रहे हैं। इंटरेक्टिव टेलीविजन, वर्चुअल रिएलिटी, डिजिटल वीडियो जैसी चीजें इलेक्ट्रॉनिक जनमाध्यमों के अद्यतन तकनीकी रूप 'मल्टीमीडियां' का अभिन्न अंग बन गए हैं और अनुवाद इनके विस्तार का आधार। वस्तुस्थिति यह हो रही है कि अनुवाद और मल्टीमीडिया वर्तमान यूग का नवीन उपक्रम बनता जा रहा है, जहाँ अनुवाद कर्म स्रोत भाषा पाठ की लक्ष्य भाषा पाठ में प्रस्तुति का संदर्भ (अर्थात एक भाषा से दुसरे भाषा में शाब्दिक संरचना के स्थानांतरण) से इतर संकेत (अर्थात शब्द और अर्थ का समायोजन), प्रकार अथवा प्रणाली (मोड) और माध्यम (मीडियम) तक होकर गुजरता है या व्याप्त हो जाता है। यहाँ अनुवादक इन तीनों पक्षों के वैविध्य के बीच व्यावहारिक संतूलन स्थापित करके उनका समुचित प्रयोग करता है। अंतरराष्ट्रीय स्तर पर वीडियो गेम्स की बढती भारी मांग उनके स्थानीयकरण (लोकलाइजेशन) की आवश्यकता को विस्तार दे रही है। हकीकत है कि स्थानीयकरण, नए बाजार खोलने का आधार बन रहा है और इसमें अनुवाद विशेष प्रतिष्ठा प्राप्त करता जा रहा है। इसके अलावा, जनसंचार माध्यमों में उल्लेखनीय स्थान रखने वाला 'विज्ञापन' का क्षेत्र तो अनुवाद से ही ऑक्सीजन लेता है। एक से अधिक भाषाओं में विज्ञापन तैयार करते समय अक्सर अनुवाद का ही सहारा लिया जाता है।
- 3.9 आज हम देखते हैं कि मीडिया और विशेष तौर पर फिल्म जगत और टेलीविजन सीरियलों आदि में अनुवाद, एक नए कलेवर के साथ विकसित हो रहा है। यह कलेवर डबिंग, सबटाइटलिंग, वॉयस ओवर आदि के रूप में नजर आता है। इन्हें व्यवहार में लाकर किसी की भी अपनी भाषा में जो कुछ परोसा जा रहा है, उसके मूल में भाषा की सीमा तोड़ते हुए ज्यादा से ज्यादा लोगों तक पहुँचने की कोशिश काम करती है। इन आयामों ने अनुवाद को एक नई दिशा दी है। इसकी महत्ता का अंदाजा लगाते हुए पाश्चात्य चिंतक निकोलस बूरियो ने तो यहाँ तक घोषणा कर दी हुई है कि आने वाला युग डबिंग–सबटाइटलिंग का है, अनुवाद के इस प्रकार के अन्य रूपों को विशेष महत्व प्राप्त होगा। हमें यह खुले मन से स्वीकार करना होगा कि इस तरह की कोशिशों के मूल में बाजारवादी प्रवृत्ति ही है।
- 3.10 अनुवाद के संदर्भ में सूचना प्रौद्योगिकी के विस्तार ने 'भाषा प्रौद्योगिकी' जैसी अवधारणा को भी विकसित किया है। इसने वैश्विक पटल पर अंग्रेजी रूपी भाषायी साम्राज्यवाद के फैलाव को सार्थक चुनौती दी है।

भाषा प्रौद्योगिकी, आज की भाषा और तकनीकी संबंधी जरूरतों को पूरा करने में मदद करने वाला महत्वपूर्ण विषय क्षेत्र बन रहा है, जो मूलतः प्रौद्योगिकी में भाषिक नियम—व्यवस्था के प्रयोग से संबंधित है। यह 'प्रौद्योगिकी को माध्यम भाषा के रूप में अपनी भाषा से जोड़ने' और 'प्रौद्योगिकी का अपनी भाषा के संदर्भ में उपयोग करने' जैसे दो आयामों को व्यक्त करता है। भाषाविज्ञान, कंप्यूटर, कृत्रिम बुद्धि और वाक् प्रौद्योगिकी के मेल से प्रतिफलित यह विषय, प्राकृतिक भाषा संसाधन का वह महत्वपूर्ण आयाम है जिसने हिंदी सहित भारतीय भाषाओं और अनुवाद के क्षेत्र में विशिष्ट योगदान दिया। कंप्यूटर अनुवाद के अलावा, रूपांतरण, डिक्टेशन, डबिंग, सबटाइटलिंग, वर्तनी संशोधन, व्याकरण—जाँच, टेलीप्रिंटिंग, भाषा प्रशिक्षण, लेखाकरण, डी. टी.पी. आदि भाषा प्रौद्योगिकी के विविध लक्ष्य हैं। लेकिन, इसके सार्थक प्रयोग के लिए भाषा को 'टेक्नोलॉजी—फ्रेंडली' बनाने की जरूरत है, जो कंप्यूटर प्रणाली का मानकीकरण करके भाषा—अनुकूल बनाकर और हिंदी भाषा को तकनीक—अनुकूल बनाकर संभव हो सकता है। साथ ही यह भी जरूरी है कि भाषा प्रौद्योगिकी का यह नया विकास, वास्तव में 'सूचना प्रौद्योगिकी के अंतर्गत ही संभव है क्योंकि जहाँ सूचना प्रौद्योगिकी, सूचना संसाधन से जुड़ा विषय है और भाषा प्रौद्योगिकी इसे संसाधित करने का माध्यम सिद्ध होती है।

- 3.11 अनुवाद का बढ़ता व्यवहार—क्षेत्र और नए—नए आयाम, भाषा के विकास में भी सहायक हो रहे हैं। यह विकास नए शब्दों—अभिव्यक्तियों का लक्ष्य भाषा की प्रकृति के अनुसार होने, उनके माध्यम से भाषा की अभिव्यक्ति क्षमता बढ़ने पर आधारित होना चाहिए। यदि नए शब्द या अभिव्यक्तियाँ लक्ष्य भाषा की प्रकृति के अनुरूप नहीं हैं और वे उसके सहज विकास में बाधक हैं तो ऐसे में भाषा का विकृत विकास होगा ही। अगर अनुवाद के माध्यम से लक्ष्य भाषा कृत्रिम भाषा का रूप ले लेती है तो वह भाषिक विकास का नकारात्मक पक्ष माना जाता है। इसलिए गुणवत्ता के स्तर पर समझौता नहीं होना चाहिए।
- 3.12 दूसरी बात यह भी है कि हालाँकि व्यावहारिक गतिविधि के रूप में अनुवाद कर्म के दौरान उभरने वाली भाषा–संस्कृति संबंधी चुनौतियाँ बाधा उत्पन्न करती हैं। ये सीमाएँ–समस्याएँ दूसरी भाषा के समाज–संस्कृति को आहत तक करने वाली भले ही नजर आती हों, लेकिन अनुवादक विभिन्न युक्तियों को अपनाकर इनसे पार पाने की सार्थक कोशिश करता है। वैसे चुनौतियों के बावजूद, अनुवाद का महत्व और व्यवहार किसी भी तरह से कम नहीं हो जाता। वास्तव में आज की बाजारवादी व्यवस्था में अनुवाद की अनिवार्य स्थिति बन गई है और व्यवसाय की 'रीढ़' बनते जा रहे अनुवाद का महत्व दिनोंदिन बढ़ता ही जा रहा है।
- 3.13 लेकिन, हमें इतने ही में संतोष करके नहीं बैठ जाना चाहिए। वास्तविकता यह है कि आज के बाजारवादी दौर में अनुवाद को अभी और अधिक विस्तार देने की जरूरत है। भारत के संदर्भ में इसे हिंदी भाषा तक सीमित रखना ही काफी नहीं है। भारत की विभिन्न क्षेत्रीय भाषाओं तक इसकी पहुँच को बढ़ाने से बाजार के आकार एवं आयाम में वृद्धि होगी। जैसे, उत्पादों के विज्ञापन, उसकी पैकिंग सामग्री आदि तक में दिए गए निर्देशों में भाषायी परिवर्तन नजर आए। हालाँकि इस दिशा में कुछ कोशिशें भी हुई हैं। जैसे, पम्फलेट और पोस्टर आदि बाजार की प्रचार सामग्री को प्रादेशिक भाषा के साथ–साथ द्विभाषिक बनाकर तैयार किया जाता है। भाषायी परिवर्तन लाने के लिए बेहतर प्रयास तो यह कहा जा सकता है कि देश–भर के लिए हिंदी में तथा जिस राज्य में उत्पाद भेजा जा रहा हो, उसकी प्रादेशिक भाषा को माध्यम बनाया जाए ताकि उपभोक्ताओं से सार्थक संवाद स्थापित किया जा सके। इससे उपभोक्तावादी बाजार का विस्तार होगा और उसे मजबूती प्राप्त होगी। ई–मार्किटिंग के क्षेत्र में भी अब भाषा के प्रति और अधिक संवेदनशील होने की जरूरत है ताकि अनुवाद के माध्यम से गतिशील संवाद स्थापित करने की स्थिति बन सके।
- 3.14 अनुवाद की व्यापकता बताती है कि अनुवाद कर्म अब सिर्फ व्यक्तिगत रुचि का विषय नहीं रह गया है, सामाजिक–राजनीतिक, आर्थिक और व्यावसायिक आवश्यकताओं पर आधारित अनिवार्य गतिविधि हो गई है। इस स्थिति में अनुवाद, व्यक्ति परिधि से निकलकर सामाजिक आवश्यकता की जरूरत बन गई है। इसपर अपरिहार्य निर्भरता के कारण समाज में अनुवाद कर्म को अब संगठित रूप में किया जाने लगा है, उसका स्वरूप संगठित व्यवसाय के रूप में उभरकर सामने आ रहा है। यही कारण है कि आज अनुवाद एक व्यवसाय बन गया है। अनुवाद एजेंसियों की स्थापना या फिर आउटसोर्सिंग इसके उदाहरण है। लेकिन, इसकी यही व्यावसायिकता ही चुनौती भी खड़ी कर रही है जरूरत अनूदित पाठों की गुणवत्ता की ओर ध्यान देने की भी है। बाजारवाद के इस वर्तमान दौर में अनुवाद का सशक्त करना, आज के समय की जरूरत है। वैसे, सभ्यता के विकास के साथ–साथ लगातार व्यापक और विस्तृत होते जा रहे अनुवाद के क्षेत्र, वास्तव में हमें यह संकेत दे रहे हैं कि अनुवाद आज की जरूरत है और कल का स्वाभाविक विकास–उपकरण। ऐसे में वह दिन दूर नहीं जब हमारे जीवन के प्रत्येक क्षेत्र में अनुवाद का ही वर्चस्व होगा।
