Executive Summary for the State of Goa (2012-17, 2017-22)
### Background

Dexter Consultancy Pvt. Ltd has been mandated by National Skill Development Corporation to conduct the district level skill gap assessment for the state of Goa and provide specific inputs and recommendations for multiple stakeholders involved in improving the skill scenario in a state. NSDC, a public-private initiative, promoted as a part of National Skill Development Mission, has development of research base for enabling better decision making across stakeholders in the skill development space, as one of its key objectives under which district-wise skill gap assessment studies have been conducted in multiple states. The Goa study is aimed at building a comprehensive directional guide for various stakeholders to take cues for their actionables.

### Approach & Methodology

The study takes a 3-pronged approach wherein the entire skill scenario in the state is mapped from the angles of economic growth and related human resource requirement, the demographic and socio-economic scenario and related human resource availability as well as the supporting infrastructure enabling skilling in the state. By mapping all the 3 perspectives, key areas of intervention are identified based on a detailed Qualitative as well as Quantitative skill gap assessment. Extensive primary interactions with the decision makers in the industries, vocational training providers as well as Government bodies were conducted to understand the demand & capacity side of the skill scenario. Additionally, one to one interactions with multiple target groups and their parents & influencers were also conducted as a part of the study to understand the youth aspirations and their constraints along with their decision making process. A total of more than 3500 interactions, in total, in both the North as well as South Goa districts, were done across multiple profiles during the study.

### Skills Scenario

In terms of economic growth, the share of services sector has been significantly increasing in the state and with the mining activities being affected, services and especially Hospitality are being looked at for absorbing the impact of unemployment generated from the mining sector. However, with an average of 9%-10% economic growth in the last few years, Goa has been growing quite well recently. Within manufacturing, Pharmaceuticals has been present ubiquitously both in the North as well as South Goa districts. Additionally, FMCG, Steel as well as Ship Building have emerged as high employment potential sectors in the state. Given Goa’s natural biodiversity, Food Processing is also an industry that has high growth likelihood in the future. In Services, Hospitality, the biggest job creator, has not only seen growth in terms of expansion of base for key indicators like tourist arrivals but it also has been experiencing an upward movement in the value chain with increase in the number of charter arrivals as well as lot many upcoming high end hospitality properties in anticipation of the growth.
So, keeping in view the expectation of the state moving onto medium to high growth path given the favorable policies, the estimated incremental human resource requirement of the state across primary, secondary as well as tertiary sectors during the XII plan as well as XIII plan, stand at 100k and 126k respectively.

However, in terms of human resource availability, Goa is likely to feel the pressure of huge inward migration, as in the recent past and unless a significant increase is propelled through Government and Institutional intervention in encouraging higher participation in labour force through promotion of formal as well as vocational education, the issue is likely to snowball further. Skilling, given the cultural gene of the state, gels perfectly with this aimed actionable. One of the other reasons for the emergence of this potential issue is also the much lower population growth of the state that stands at 8.2% for the last decade against 17.6% for the country. The state observes a large proportion of its population dropping out in the latter half of their schooling education and while multiple options in Hospitality allure them with its ingrained seasonal variations suiting the psyche of the local population, skill development remains a major mechanism to address the dropping-out issue by channelizing them into mainstream employment. On a qualitative note, when it comes to youth aspirations, services sector rules the roost. Especially, in the coastal areas, there is a strong trend of joining the hospitality sector and thereafter going abroad, joining cruise liners. Recent developments in IT & ITes along with Retail have also occupied the youth mind space in terms of their aspirations. In the hinterland, the behavior resembles that of surrounding areas of Karnataka and Maharashtra wherein undergoing high education, especially technical education gets priority. There is also a trend observed among a smaller group in the direction of taking up entrepreneurial routes.

So, with the above issues in place, the state’s working age population is likely to grow from 10.4 Million in 2012 to 10.8 Million in 2017 to 11.3 Million in 2022 adding approximately 40k additional working age population from 2012 to 2017 and 50k from 2017 to 2022. However, given the relatively lower willingness to work among the local population, reflected through the Labour Force Participation Ratio (LFPR), the estimated skill gap in the state over 2012-17 as well as 2017-22 time period end up at 80.2k and 104.8k respectively, which indicates huge quantum of project skilled manpower deficit for the state.

Based on the gap between the human resource requirement as well as availability while considering the capacity existing at various levels in Goa, a deficit exists across all the levels though the on ground interactions suggest that most of it is felt severely at the semi-skilled level. This clearly indicates the need for revamp in the capacity of vocational training institutes in the state. In the unskilled level, significant inward migration has already been experienced in the state. In the highly skilled level, while the inputs have been mainly in the direction of qualitative improvement of course structure, the quantitative need felt is not that severe. Also, considering the high drop-out numbers at school level on a relative basis, role of vocational education in the larger context is accentuated. In terms of industrial feedback on the quality of the output from training institutes, industry opined that practical orientation which was largely missing in students.

In context of ongoing efforts to address the skill gap, the state runs multiple initiatives and schemes which encourage capacity building in skill development area with both private as well as public involvement. In a move to standardize and improve the quality of vocational courses being run at multiple private institutes, they have brought under the purview of the larger umbrella of
HRDF. While this initiative by the Directorate – Craftsman Training has been well received, there are multiple other initiatives being run at departmental levels by directorates of Agriculture, Fisheries, Geology & Mining, Health, etc.

**Recommendations**

The recommendations here have been structured based on the specific stakeholder for the respective actionable is most relevant. So, while there are areas of recommendations which are overlapping and need joint interventions from multiple stakeholders, the classification of a particular recommendation is done on the principle of who happens to be the major implementation agent for the same.

The recommendations are aimed at the 4 major stakeholders who keep the overall skilling machinery running smoothly i.e. the Government, Industry, Training Providers and NSDC. The detailed recommendations are laid out below.

**Government**

Key recommendations for the Government firstly aim at addressing the immediate capacity additions and modifications across courses in the Govt. and Pvt. ITIs. Courses aimed at Hospitality, IT & ITes, Retail, Banking as well as Manufacturing have been suggested for capacity additions. Some courses like Hair and Skin care have also been suggested keeping in mind promotion of self-employment, especially among the women, in the region. The report also indicates the role of SDIS scheme in addressing the long term gap in quantity. In terms of improving the quality of vocational education delivered, some measures like performance rating among the HRDF institutes as well as introduction of multi-skilling courses in the ITIs along with mobility from the schools to ITI / VTI have been suggested. One of the key roles of the government is also envisioned in promoting the uptake of Agriculture and Allied activities as career choices among the local youth. The detailed recommendations are indicated below:

**Capacity Additions / Modifications**

Herein, the scenario of key drivers of growth in services in North Goa is the same as South with Hospitality ruling the roost. Within manufacturing as well, some the most demanded skills are the more generic ones useful across sectors. So, below, we have enlisted the important trades / courses where capacity addition as well as modification is needed to address the quantitative gap.

**Capacity Additions:**

Hospitality Assistant, Banking Sales, Food Production & Baker (Hospitality), Steward, Bartender, Spa Therapist, BPO Executive, Retail - Floor Sales Staff, Automobile Overhauling / MMV,
Electrician, Mechanic Electronics, Fitter, Banking FDO, General Tradesman (Hospitality), etc. are the trades where significant capacity addition is required to address the imminent gap at the semi-skilled level. These capacity additions will mainly have to be done at the Government ITIs as well as the HRDF institutes provided the latter recommendation of rating among the HRDF institutes to ensure better quality of delivery are ensured.

**Focus on SDIS Implementation**

Given the significant need of specialized skills in the hospitality sector as well as pharmaceuticals sector in the district, the role of SDIS scheme will be pivotal. Also, a large number of school dropouts as a part of the incremental human resource available for employment also indicate the importance of this scheme’s successful implementation in the larger context.

**Constitution of a Hospitality Sector - Skill Development Nodal Agency**

Given the presence of Hospitality sector in the district and the expected growth not just in the North Goa but also in the South Goa districts, widespread mushrooming of institutes with training in Hospitality sector has occurred in the last few years. Ensuring the quality of delivery, while enabling an integrated and practical approach to hospitality functions is required in the training institutes to facilitate effective skilling.

**Performance Rating among the HRDF Private Training Institutes**

HRDF institutes have their significant presence in the North Goa as well. In fact, in addition to them, multiple educational institutions kick started by Christian missionaries also run multiple courses across formal as well as vocational streams. So, standardization its quality is an important need for addressing the key pain points of the industry. This can be driven through introduction of a performance rating system which will create a competitive landscape among the HRDF private training institutes. Key parameters which will trigger the improvement should include Trainer Skills & Placement Records. While the earlier one is the important intuitively identified cause, the latter measures the output and both the cause as well as the outputs should appropriately be reflected in the rating system. A baseline study to understand the current state of affairs on these broad areas to define the key tracking indicators should be conceived.

**Increase the Aspirational Value of Agriculture & Allied**

Since Goa is immensely gifted with natural resources compared to other states, the potential of Agriculture and Allied industry in employing the local youth is also very high. However, the important issue to be tackled here before this materializes is the aspiration value of this sector in the minds of the youth. For the same, it is recommended that dedicated awareness campaigns to glorify agricultural achievement through video recording of best practices and sharing through dissemination across the state be done. Also, rural unemployed youth training in trades like Coconut Plucking, Cashew farming & processing needs to be promoted. Also, the implementation of the same needs to take a priority in Hinterland since its receptivity to such measures is higher and then it can be taken to the coastal areas.
In fact, this sector is receiving major importance under the Neturlim Model Village scheme which envisions all round development of a village to include areas like rural development (Gramin Vikas), skill development, infrastructure development, water and sanitation, dairy development, agriculture development and others.

**Promote CoE courses**

Given the clustered presence of some sectors in the North Goa district, it is required that the CoE courses with special focus on some sectors like Hospitality need to be promoted more. For better learning and development facilitation, the local industry is also open to allow CoE type course students for OJT training in their premises.

**Mobility from Vocational Stream in Schools to ITI / ITC & Pvt. Training institutes**

While the state government has already implemented vertical mobility from ITIs to the degree / diploma colleges, the same will have to be seamlessly integrated with Vocational stream students in the schools. This will significantly facilitate higher enrolment in vocational stream in schooling as well. Also, Manufacturing vis-à-vis Services screening to assess the candidate suitability will have to be introduced for better choice of courses linked to career plans or aspirations while entry into vocational stream in the schools. In fact, excellent parallels exist in other states like Gujarat where similar mechanisms have been implemented. Please find mentioned here under the brief description of the same.

**Gujarat Case Study**

Government aims to facilitate students of vocational courses to get admissions for higher education for which it had decided to upgrade two-year post-standard-VIII technical courses, taught at Industrial Training Institutes (ITIs), at par with standard-X, and three-year post-SSC diploma, taught at Polytechnic colleges, at par with standard-XII.

So, as per this norm, students completing two years ITI course after class X or its equivalent course, having passed NCVT or GCVT examinations would be treated at par with Gujarat Secondary Education Board or Gujarat Higher Secondary Education Boards standard XII or Gujarat Open School and could opt for higher courses.

Similarly, students who complete three year diploma courses in polytechnics after class X would be treated at par with class XII pass students. Also, since these students would have studied one year more than class XII students, they may be considered for exemption of a year's study in college with 40 credit points under choice-based credit system.

This upward mobility step has been received quite well and has resulted in the increased enrolments in the vocational training institutes across the state.
Industry

The industry recommendations mainly revolve around encouraging the interfacing events from the academia’s side through multiples modes like Train the Trainers as well as more internships and day tours for students while actively supporting them in course refinements as well. The detailed recommendations are as under:

Involvement in Skill Development

North Goa has the presence industry associations which have been very active in addressing issues of multiple nature pertaining to their respective industry. Be it the apex industry associations like CII or GCCI or industry specific associations like TTAG or Goa Mineral Ore Exporters’ associations, industry is increasingly becoming sensitive to the issue of skill development faced by the state. While discussions on multiple forums have happened along these lines, the role of the industry in participative course structure design with better involvement of associations, through its sectoral councils, will have to be triggered for feedback on course curriculum. This will also reflect the need for internships and apprenticeships which can be brokered through the associations.

Facilitation of Practical Learning

Since one of the major issues faced by the industry and especially manufacturing industry is the quality of the manpower available to them, it has to play a major role in facilitating practical learning to the ITI students. So, regular industry visits is a good starting point to the industry. It can also be subordinated with “Train the Trainer” program because it is only when the trainers are exposed to the latest technology and its practical aspects, that the students will become aware about the same as well. Also, mid-term internships should be inherent to the structure of industry and its mechanism to encourage industry – academia interface. One of the specific actionable suggested by the industry given its closely knit structure in the state and the activeness levels of the related associations, was to launch an online portal aggregating the internship demand from tourism and other sectors and partner with institutions. This will help remove asymmetry of information between the industry and academia as well.

Acceptance of Occupational Standards & Wage Rate Revisions

With sector wise NOS being developed by Sector Skills Councils (SSC) PAN India, Goa can be a major contributor in the formation of the Tourism & Hospitality SSC given its varied and exhaustive sector presence in the state. Additionally, based on the currently widespread as well as potentially high growth sectors in the state, it can also play a very active role in the Logistics SSC, Retail SSC & IT / ITes SSC as well as BFSI SSC.
Training Providers

For the Private training providers, one of the key suggestions include better involvement with the industry through an active and well-structured industry interface. It also points at the need for student counseling given the high proportions of students taking up courses without complete understanding of the career ahead. Also, the training institutes are suggested to participate along with the Government in elevating the social status of agriculture as a career choice. The details are as under:

Trade Selection & Capacity Planning

Based on the key course level skill gaps identified which point towards the required course capacity additions, the institutes should realign their capacities to focus primarily on the Tourism sector followed by Retail, IT / ITes, Pharmaceuticals and Food Processing courses. In fact, institutes should also look at developing niche courses in Tourism space in upcoming areas like Eco-tourism, Medical-Tourism, etc. Also, there’s an increasing aspiration among the youth tending towards self-employment and so courses aimed at the same should be started. Such courses would also enable the institutes to broad base their impact to target groups which are way below the mainstream employment radar.

Improved Industry Interface

The degree of activeness as observed among the multiple Government and Private Vocational Training Institutes to extend themselves and increase ties with the local industry, needs to improve. This can enable continuous updation of knowledge on the part of the trainers while ensuring better exposure for the students.

Student Counseling

One of the major reasons why students lose interest in their career choice, especially in vocational stream wherein the courses are lot more focused, is the lack of understanding of how a particular study option translates into a career and accordingly a lifestyle. So, to reduce such instances, better engagement at school level to increase Vocational Stream enrollment in indeed required in the district. Also, Alumni -Guest Lectures to give students a practical picture of the industrial scenario can also be facilitated.
The key suggestions for NSDC include channelizing funds through its investee training companies in areas where the skill gap is most severe like Hospitality and Agriculture along with allied services sectors. While, NSDC needs to also put in significant effort in making its presence felt in the state, its role in the time to come, in developing NOS, especially Tourism & enabling its acceptance will be pivotal in the state.

**Spread Awareness about its initiatives**
Since NSDC just has one training partner providing its services in the state and the partner too has just initiated the action recently, the awareness about NSDC’s initiatives in the state is quite limited. So, active efforts on this front are required by the NSDC training partners in the state for engagement with associations and the government. In order to achieve this, Goa should also be included in the list of states where NSDC is planning to launch the marketing campaign.

**Funding Initiatives**
While further training partners can indeed be funded in the state in the Hospitality sector, it can also look at widening its network in other sectors like IT & ITes, Logistics, Pharmaceuticals & Food Processing.

Also, instead of new entrants in the state, NSDC can also look at supporting existing vocational training providers especially the Christian missionary run vocational training setups who are interested in funding and already offer variety of training programs. Also, agriculture and allied sector should be brought to its forefront for intervention by NSDC and the same can be done by promoting SHGs to take up vocational training with NSDC’s financial support.

**Sector Skills Council**
There are some industries in the state, e.g. Hospitality and Mining which can act as major contributors in the process of forming the NOS relevant to them. A mechanism to include their inputs should be ensured.

Also, the SSCs should facilitate establishment of a testing setup for Skill Certification with local industry support across relevant sectors.

**Co-ordination with State Government**
It is important that there is no duplication of effort between the NSDC as well as State Government initiatives. So, accordingly, individual focus areas for skill development for NSDC and the state Government should be defined. Also, directional consideration of the status of progress of state initiatives should be incorporated while preparing a longer term intervention plan by NSDC for the state through its training provider network.