



Land Ports Authority of India Department of Border management Ministry of Home Affairs



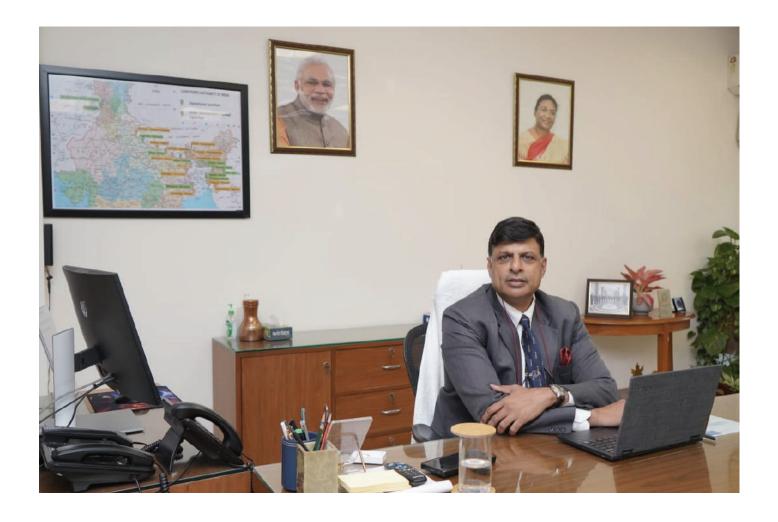
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# Leadership Insights

# Steering vision from the Chairman's Desk

Safe, synchronized, and sustainable land port encapsulates the essence of modern trade facilitation; where security, efficiency, and environmental responsibility converge to create a robust and future-ready trade ecosystem. The Land Ports Authority of India (LPAI) is at the forefront of this transformation, striving to establish land ports that not only meet the dynamic demands of international commerce but also uphold the highest standards of safety and sustainability. In this issue of Gateway to India, we explore the critical role of the Land Ports Authority of India (LPAI) to ensuring secure transit for cargo and passengers, fostering gender equality, and facilitating synchronized trade that contributes to a sustainable environment, thereby highlighting its essential role in advancing the nation's prosperity and collective welfare.

At the heart of LPAI's endeavours lies the creation of safe passages, that not only fosters connectivity but also fortifies international goodwill. The Kartarpur Corridor developed by Government of India stands as a testament to India's commitment to cultural harmony.

This issue casts a spotlight on the critical theme of security, where the Land Ports Authority of India (LPAI), in collaboration with its Border guarding force stakeholders, serves as a stronghold of alertness and strength. The issue includes contribution of Assam Rifles and Border Security Force (BSF), stationed along India's eastern frontier at the Moreh, Attari and Petrapole land port. These dedicated forces establish a robust defence against potential threats while nurturing an environment conducive to the free and secure movement of goods and cultural ties. The unwavering resolve of these forces to defend the nation's borders and facilitate legitimate trade, despite significant obstacles, is brought to the forefront.

Synchronizing trade at land ports is a critical aspect of facilitating smooth international commerce and enhancing the efficiency of cross-border transactions. The Land Ports Authority of India (LPAI) plays a central role in this process by implementing a range of measures designed to streamline operations, reduce bottlenecks, and promote seamless trade activities. In the edition the transformative journey of land port development, where LPAI's strategic revamps setting new benchmarks in operational efficiency and trade facilitation has been explored. The cross-border commerce and statistics offer a quantitative glimpse into the thriving trade ecosystems that LPAI meticulously curates and enhances.

In the verdant landscapes of Northeast India, LPAI's robust infrastructure initiatives acts as a catalyst in elevating trade facilitation with Bangladesh. These land ports support economic integration, knitting together a network of opportunities that span the subcontinent.

Further, sustainability is not just a buzzword for LPAI- it is a guiding principle that shapes the role of land ports in advancing eco-friendly cross-border trade. The green audits of land ports charts a course for a future where environmental stewardship and trade coalesce.

LPAI's commitment to inclusive growth resonates through its gender equality initiatives, empowering women to play equal roles in the domain of trade and border management, as their male counterparts. By building ports and competencies, LPAI is not just constructing physical infrastructures but also nurturing the human capital that propels India's trade engine forward.

Join us as we traverse the landscapes of LPAI's achievements, where every checkpoint is a milestone in India's journey towards a secure, prosperous, and sustainable future.

Jayant Singh, Chairman, LPA



# **Border Security Force (BSF)**

# Ensuring the Security of ICP Attari



The Integrated Check Post at Attari is one of the 15 ICPs approved by the Government of India to provide the adequate infrastructure for cross border movement of persons, vehicle and goods at the designated entry and exit points on the International Borders of the country. The ICP Attari houses all the regulatory agencies like Immigration,

ICP Handling
Capacity

Passenger per annum: 1.5
million

Cargo per

Act as gateway to Trans Asia connectivity

Salient Feature of ICP Attari

## Smuggling

BSF is ensuring prevention of the smuggling of Arms /Explosive / Narcotics items.

- Use of drones by ANEs for Smuggling of Arms/ Explosive/ Narcotic items.
- Detection of any undeclared/ suspicious item.

### Security

Frequent trans-border skirmishes and deteriorating; diplomatic relations often affect trade and passengers movement.

- Disappearance of Pak Truck driver after entering inside ICP.
- Law and order situation created by Coolies / Porters / Worker groups / Taxi drivers/Jattha Pers.

### Safety

Injury to Officials working in ICP.

- Forceful entry of vehicle with Arms and Explosive.
- Sabotage action after infiltrating into Indian Territory.
- Suicidal attack & illegal Infiltration/ Exfiltration.
- Fire incident in Cargo / Passenger terminal.

### Challenges Being Faced by BSF at ICP Attari



Customs, Border Garding Force, Quarantine, Health, etc. in a single complex, equipped with all required amenities. The ICP Attari handles both commercial (trade) traffic and passenger (cross-border) movement.

A statutory body, that is, Land Ports Authority of India (LPAI) has been established to regulate various functions at ICPs. As per LPAI Act

2010, respective Border Guarding Forces will be responsible to provide security to the ICPs. The ICP, Attari is located at about 28 Kilometres from Amritsar: adjacent to the India-Pakistan International boundary. It has been developed in 120 acres of land and became functional on 13th April 2012.

Attari was the first land port to be



operationalized in April 2012. Since then an addditional eleven land ports have been made operational.

ICP Attari (Integrated Check Post Attari) is a modern border crossing facility, which handles both Trade and passenger traffic between India and Pakistan. This border is known for the Attari-Wagah Border Ceremony, a daily affair held between BSF and Pak Rangers.

# ICP Attari Reflects the Example of Integrated Border Management

As border management encompasses several functions performed by different agencies, the concept of Integrated Border Management (IBM) seeks to map and align the functioning of various agencies in such a manner to avoid any duplication and gaps in their functioning to meet the broader common challenge of facilitating the movement of legitimate people and goods while maintaining secure borders and meeting national requirements.

The ICP, Attari controls and regulates the movement of Passengers, Import and Export of goods between India and Pakistan/Afghanistan. Several stakeholders, both Govt. and Private- with their employees, contractors, labours, etc. perform various activities. Day-to-day functioning of the ICP,

Attari involves the movement of many personnel / porters etc. in and out of the premises who handle, clear and dispatch a huge volume of cargo.

### Ensuring Security at ICP Attari by BSF

- The BSF (Border Security Force) is the Central Armed Police Force in India tasked with guarding the country's Indo-Pak and Indo-Bangla borders along with the corresponding ICPs.
- The BSF ensures security of the Attari border. It plays a vital role in managing the security of the ICP, Attari and surroundings. This includes monitoring and controlling the movement of people and goods, preventing illegal activities such as smuggling, infiltration, exfiltration and maintaining law and order within premise.
- Ensuring that all passengers and goods crossing the border are safe.
- Security and access control at ICP Main gate.
- Security and movement control of passengers.
- Frisking and scanning of hand luggage.
- Security check of trucks/drivers at Zero-line trade gate.
- Surveillance of drivers and porters in Cargo area.
- All round perimeter security of ICP.
- Coordinating with other agencies to





enforce border laws and regulations.

#### Infrastructure at ICP Attari

Customs and Immigration facilities: These are equipped with advanced surveillance and communication systems to handle the documentation and clearance of travellers and goods.

Cargo Terminal: A designated place for loading and unloading of the imported/exported goods.

Warehousing Facilities: A place to store the goods temporarily before clearance or export. Passenger Terminal: Streamlined for Immigration and Customs checks for passengers travelling between India and Pakistan.

Security System: BSF is responsible to provide the security to ICP Attari and a control room has also been established to keep close watch on the activities of Indian Truck drivers, Pak truck drivers, Labors, Porters etc.

## Inter-agency coordination

### Training

LPAI has taken many strides forward in



collaborating with Customs, Immigration and Intelligence agencies to maintain security and streamline operations.

BSF organized a training for group- 'A' Indian Trade Service (ITS) Officer trainees at ICP Attari for the overall development of the officer trainees. During the training, supervisory staff of BSF conducted various training sessions and lectures on procedures, rule positions and challenges being faced at ICP Attari.

BSF also contributes to training of newly recruited Inspectors of CGST & Customs. Recently, some of the trainees from various zones visited ICP, Attari as a part of their field visit and training programme.

#### Joint Operations with Customs

Troops of BSF deployed for frisking/ scanning duty in Passenger Terminal have performed their duties with extra alertness and vigil. During joint Ops with Customs, approx. 04 KGs Gold (in 08 instances) has been recovered/seized/detained in the year 2024.

### Sentinels of Security at ICP Petrapole

India stands at the cusp of becoming a 5 trillion-dollar economy. Land ports are an

important cog in the giant economic wheel of India. Apart from being a noticeable contributor in the economy, land ports serve various other important functions like improving relations with neighboring countries, generating employment opportunities, facilitating businesses, tourism etc. Land Port Petrapole is the largest land Port in South Asia, located along the international border between India and Bangladesh. It is at about eighty km from the city of Kolkata. Burgeoning trade, huge passenger movement and modern world class infrastructure showcases the resolve of the nation in development through Land Ports.

For harnessing the potential of Petrapole it is of utmost necessity that all the operational functions run in a streamlined manner, and all the stakeholders feel safe and secure in their working environment. Land port Petrapole is like a huge tree in which branches of various agencies function like immigration, customs, plant quarantine and animal quarantine. Custom house agents, private businesses, West Bengal Transport Department etc. with their human resources and related infrastructure provided by LPAI. Security is the foremost requirement in the effective and efficient functioning of the port. Without a secure and stable environment, no function can be performed. Border Security force (BSF) through its prime role of guarding Indo-Bangladesh border is the security agency at Petrapole in conformation to the LPAI Act. BSF takes care of the security element in the port, in an effective and efficient manner.

Security provided by BSF at Land port, Petrapole are multi-faceted and specific tasks assigned to is provided below-

# Security at Passenger Terminal Building (PTB)

PTB is the place from where movement of international passengers takes place between India and Bangladesh. Located close to the zero line, it is an important installation of

Land Port, Petrapole. BSF is the first point of contact for any passenger entering the Passenger Terminal Building (PTB) from Bangladesh and the last point of contact before passenger exits India. BSF performs following functions at PTB:

- Checking of the passport to confirm the identity of the person holding the passport, validity of the visa, and that the passengers are exiting the terminal after going through all essential processes;
- Making sure the passenger is not in inebriated condition;
- Manual frisking of the passengers to prevent carriage of any Contrabands, explosives, Narcotics, arms and ammunition;
- Scanning of the baggage to prevent entering of any contrabands, explosives or narcotics, arms and ammunition;
- Providing security and controlling the movement of passengers in and around, so that agencies perform their tasks in smooth and secure environment;
- Checking of the international buses, through bomb disposal team and Sniffer dogs, preventing passage of any contraband and explosives.

Border Security Force (BSF) also performs weekly retreat ceremony on two days which is an important attraction for tourism. It is also an effective means to improve relations between India and Bangladesh.

The duty of Border Security force does not end at only providing security. A passenger if in need of any assistance always gravitates towards the uniform. All the personnel of BSF are well trained in use of soft skills and medical first response to help the passengers in whatever way it is possible.

#### Security at Cargo Terminal

Nearly 30 percent of land-based trade between India and Bangladesh takes place through Land Port Petrapole contributing almost 70% of value of this bi-lateral trade. BSF here also provides effective security so that trade movement is facilitated. BSF performs following security functions at Cargo terminal:

Checking of outer bodies of truck, cavities, cabins, and hoods to prevent crossing over of any explosive, contraband or narcotics, arms & ammunition from India to Bangladesh and vice versa;

- Facilitating secured movement of drivers from India to Bangladesh and vice versa whose trucks do not get emptied due to various reasons;
- Presence in the cargo area providing confidence to labour, drivers resulting in seamless flow of trade;
- Security to Custom gates.

### Perimeter security

Land port Petrapole is a vital installation which can be threatened by anti-national elements. BSF provides effective perimeter security to safeguard the port against any threats.

- Guarding all entry and exit points throughout the day,
- Constant vigil by being deployed on sentry posts along the perimeter,
- Foot and vehicle patrolling throughout day and night,
- Operating CCTV cameras covering the whole port,
- Dedicated Quick Response Teams (QRT) for effective response to any contingency.



The presence and visibility of BSF acts as a deterrent. However, going beyond its security related presence, which is generally seen as a restrictive practice, BSF plays facilitative role at land port in ensuring efficient and effective functioning of all stake holders in safe and secure environment.

#### Successes

BSF throughout its deployment in port since its opening has achieved many successes. Firstly, there has been no major incident regarding safety of the infrastructure and installations. There has been no attack or harm to anything whatsoever. Secondly, BSF has seized substantial quantity of contraband, narcotics and ammunition resulting in prevention of smuggling or any harm to our country and essential bi-lateral relation, the mainstay of land port success. BSF effected seizure worth more than Rs 79 crores so far in last 6 years of its presence in Petrapole Land Port.

## Challenges

BSF also faces many challenges at ICP which needs to be responded effectively. The dynamic nature of Indo-BD border changes their essence very quickly enjoining upon BSF as a professional force to remain ever alive to the dynamic challenges and respond with improvisation and ingenuity in confirmation to national policies. Some of the challenges being faced are:

- Attempts for crossing over of contraband items in the country.
- Prevention of attacks like lone wolf attack, terrorist activities by any anti-national element; considering the fact that ICPs are vital installations, which can pose threat not only to humans and the infrastructure but also to bi- lateral relations.
- Curbing the infiltration/exfiltration of persons without valid documents.
- Prevention of human trafficking.
- Large scale construction work causing

- huge movement of labour, and many openings created in the perimeter.
- Efficient working relations with all stake holders and local administrations.
- Improvisation to meet the security equipment deficiencies.

#### Conclusion

Land port Petrapole performs very important functions. Security is an important element, which facilitates seamless execution of all other functions. The Border Security Force (BSF) is safeguarding the Port round the clock through all its might and strength in ensuring the achievements of the very purpose of LPAI.

Article By: Shri Daljit Singh Chawdhary, IPS, Director General, Border Security Force



## The Assam Rifles

# Safeguarding Mizoram and the Nation's Eastern Frontier





As India's oldest paramilitary force, the Assam Rifles have safeguarded Mizoram's sensitive Indo-Myanmar frontier since the 1830s. Its presence became indispensable as Mizoram's 510 km Myanmar border; a dense,



mountainous expanse; posed constant security challenges. This rugged, unfenced boundary heightens the risks of insurgent infiltration, smuggling, and unauthorized movements. Assam Rifles, often referred to as the "Sentinels of the Northeast", has been instrumental in mitigating these dangers through effective border operations and strategic collaborations. It relentlessly protects national security and local stabilityidentifying vulnerabilities and strengthening safety measures necessary for protecting the infrastructure and stakeholders.

# Myanmar's Political Turmoil and Its Impact on Mizoram

Political turmoil in Myanmar following the 2021 coup triggered severe instability, leading to significant refugee and insurgent movements across the border. The Free Move Regime (FMR) permits certain border communities to cross within a limited zone; however, widespread non-adherence has led to unchecked crossings, complicating Mizoram's security dynamics. Assam Rifles' role extends beyond surveillance to managing humanitarian needs, often requiring careful balancing of security and aid.

The state's strategic location, along with economic and social vulnerabilities in the area, has resulted in an increase in trafficking activities. However, the Assam Rifles has played a crucial role in controlling these movements, working tirelessly to curb the flow of drugs, arms, and contraband across the border.

# Tackling the Surge in Smuggling of Contraband

Assam Rifles is tasked with securing the northeastern borders and managing counter-insurgency operations. In Mizoram, they have intensified their border operations, conducting both intelligence-led raids and surveillance. Stationed along a crucial stretch of the "Golden Triangle" drug route, Assam Rifles combat a persistent flow of drugs, arms, and contraband into Mizoram Additionally, Assam Rifles collaborates closely with various state and national agencies, including the Narcotics Control Bureau and local police forces, to maximize effectiveness.



Assam Rifles interacting with locals to create positive impact on Mizoram social Structure

Their vigilance has yielded numerous successful interceptions, halting shipments of narcotics and illicit arms. A recent operation saw them seize a significant quantity of methamphetamine tablets, safeguarding the region from substantial harm. Despite frequent retaliatory threats, Assam Rifles continue their mission to dismantle organized crime and protect communities.



Major Operations and Key Successes

The valor of Assam Rifles is highlighted in countless courageous stories. One team, for example, intercepted insurgents carrying arms and drugs along a challenging mountainous path, protecting local communities from imminent threat. In another instance, an Assam Rifles medic aided refugees injured while crossing into Mizoram, offering first aid under difficult

Kawrpuichhuah, Zorinpui and Zokhawthar are three Land ports to be developed in Mizoram in phased manner.

conditions. Such accounts reflect Assam Rifles' dual commitment to security and compassion, proving their dedication to safeguarding lives and upholding humanity amidst complex challenges.

In recent years, Assam Rifles has executed several operations leading to substantial seizures of drugs, weapons, and other contraband items. Here are some key highlights:

Drug Seizures: Mizoram has experienced a

significant rise in the trafficking of heroin, methamphetamine, and synthetic drugs, primarily from the "Golden Triangle" (Myanmar, Thailand, and Laos). Intelligence-led operations by Assam Rifles have intercepted major drug consignments, including one seizure in early 2023 where a concealed heroin shipment valued at over Rs.

Assam Rifles is focusing on modernizing its operations.

Plans to equip border posts with advanced AI-driven surveillance, data analytics, and other technologies are in place to improve border security.



Twenty crore was confiscated, marking one of the largest drug busts in the region. Methamphetamine pills, often called "yaba" tablets, have also been seized in large quantities. These highly addictive drugs target youth populations, and Assam Rifles' work in intercepting such shipments has disrupted trafficking networks and drug cartels in the area.

Arms and Ammunition Seizures: The smuggling of weapons and military-grade supplies poses a significant threat, as these often end up in the hands of insurgent groups, fueling violence. Assam Rifles has successfully thwarted attempts to smuggle in automatic rifles, pistols, and explosives. In mid-2022, a large cache of arms, including AK-series rifles and machine guns, was seized. Another recent operation uncovered a well-coordinated smuggling network attempting to move high-grade explosives and ammunition into India, severely weakening militant access to weapons and reducing potential conflict. A recent operation, conducted in collaboration with Mizoram Police, exemplifies this approach. Assam Rifles intercepted a vehicle along the Serchhip -Thenzawl route containing 9,600 gelatin sticks, 9,400 detonators, and significant amounts of detonating cord. This seizure not only disrupted a major smuggling effort but underscored the scale of the region's threats and Assam Rifles' commitment to preventing the circulation of deadly supplies.

### Social and Humanitarian Impact

Assam Rifles' consistent efforts have had a positive impact on Mizoram's social structure. By intercepting drugs, they have helped curb addiction rates and crimes associated with substance abuse. This has been especially beneficial in tackling youth addiction, which has plagued the region for years.

Confiscation of weapons has also fostered a sense of security among locals, as reduced access to firearms has lessened insurgent activities, bringing more stability to these communitieshe flow of movement and reduce processing time. With these plans, LPAI aims to foster a more efficient and hassle-free experience for travellers and cargo operators.

port function is governed with clarity and uniformity.

### **Enhanced Intelligence and Border Security**

Mizoram's challenging terrain demands a unique blend of tactical skills and coordination. Assam Rifles adapt to ever-changing threats along the border, using advanced surveillance and intelligence systems alongside traditional reconnaissance. Operational success hinges on cooperation with other security forces and local authorities, making joint operations, training exercises, and intelligence-sharing essential for effective border management.

Assam Rifles has boosted intelligence sharing and strengthened cooperation with various national and state security agencies. With advanced surveillance tools like drones and thermal imaging, border monitoring has become more robust, making it increasingly challenging for traffickers to move undetected.

New border outposts and joint patrols with

Political instability and ethnic conflict in Myanmar, have led to the rise of armed groups that exploits porous border to smuggle drugs, weapons, and other illicit goods into India.

the Border Security Force (BSF) have further fortified vigilance along this porous frontier, deterring trafficking and enhancing security in Mizoram.

# Strengthening Future Border Security Measures

Mizoram shares a 510-kilometer-long border with Myanmar, characterized by challenging terrain and dense forests, which make it prone to illegal trafficking. This region's geographic features, combined with longstanding political instability and ethnic conflict in Myanmar, have led to the rise of armed groups that exploit this porous border to smuggle drugs, weapons, and other illicit goods into India.

To tackle these persistent challenges, Assam Rifles is focusing on modernizing its operations.

Plans to equip border posts with advanced AI-driven surveillance, data analytics, and other technologies are in place to improve border security. The force is also increasing outreach to educate border communities on the dangers of drug and weapon trafficking, aiming to reduce local collaboration with traffickers.

Cross-border cooperation with Myanmar's security agencies is another essential step, as working together can help address the trafficking problem at its roots. These collaborations seek to dismantle smuggling networks and limit contraband movement between the two countries.

## Ongoing Challenges for Assam Rifles

Despite its successes, Assam Rifles faces significant challenges. The Mizoram- Myanmar border's mountainous and forested terrain complicates surveillance and patrols. The political situation in Myanmar, particularly the presence of armed groups involved in trafficking, also makes law enforcement difficult. Additionally, traffickers have become adept at using local communities for logistical

support, making it harder for Assam Rifles to detect and stop illegal activities.

Corruption and limited economic opportunities in these border areas further contribute to the issue, as some residents are enticed by the financial gains from smuggling. While Assam Rifles continues to foster cooperation with local communities, economic development and education remain necessary to address the underlying vulnerabilities that fuel trafficking.

The efforts of Assam Rifles in Mizoram highlight the importance of vigilance in combating illegal trafficking. Through relentless operations and strategic alliances, Assam Rifles has achieved significant successes in reducing the influx of drugs, weapons, and contraband into India. Their ongoing efforts bolster regional security and contribute to a more stable and peaceful environment in Mizoram and the northeastern states. This continued vigilance not only strengthens national security but also brings peace and stability to the communities most affected by these threats.

Assam Riffles also oversees security of ICP, Moreh in Manipur. ICP, Moreh lies along the India-Myanmar international border around 110 kms from state capital, Imphal. The construction work for the ICP began in August 2014 on approx. forty-five acres of land with the total cost of construction of around 130 crore rupees.

It was formally inaugurated on 04 January 2019 by Honourable Prime Minister Shri Narendra Modi and is one of the functional ICPs of India.

## Moreh Land Port through Assam rifles lens

### Importance of Moreh ICP

Cross border movement of people and goods takes place at several designated entry and exit points at the international land borders of India. The existing infrastructure facilities were either not sufficient or non-existent and there was no single agency responsible to bring together various government agencies under one umbrella. This led to development of Land Ports Authority of India as central agency through which the concept of Integrated Check Posts (ICPs )was introduced by the Indian government, as a part of its efforts to streamline trade and travel across land borders. Moreh ICP is a significant component of this initiative, due to its strategic location along the India-Myanmar border.

The town of Moreh is one of the major traditional gateways for goods and people traveling between the two countries and is part of the India-Myanmar-Thailand trilateral highway, which connects the three countries over a 1,400-kilometer route. This highway is being developed to facilitate trade to flow smoothly from India through Myanmar to Thailand and extending to other Southeast Asian nations thereby enabling greater access to markets within the ASEAN region.

This facility also enhances India's ability to monitor and regulate the flow of goods and people across the border, which is important given the insurgency challenges in the region.

#### Role of ICP Moreh.

The role and important objectives are as under: -

Moreh is the traditional gateway for goods and people traveling between India & Myanmar.

It is part of the India-Myanmar-Thailand trilateral highway.

Assam Riffles oversees also oversees security of ICP Moreh in Manipur.

Trade Facilitation: ICP Moreh is designed to streamline and facilitate border trade between India and Myanmar through customs and immigration services, thus making cross-border trade more efficient. It is equipped with facilities like warehouse, cargo, and passenger handling terminals and few other services like quarantine facilities for animals and plants, among others.

Enhancing Security: Another key function of ICP Moreh is to improve border security. Given the strategic location of the India-Myanmar border, there are significant challenges related to insurgency, smuggling and unauthorized movement. The facility has security infrastructure; including surveillance systems, to prevent these issues and to ensure that only legitimate goods and people can cross the border.

Supporting Regional Connectivity: ICP Moreh aligns with India's Act East Policy and facilitates trade and travel, helping to foster stronger economic and cultural ties with Myanmar and other ASEAN countries. ICP Moreh helps to reduce delays due to paperwork, inadequate infrastructure, and lack of streamlined processes such as customs clearance and immigration checks which can be completed in a single location. This not only reduces transit time but also enhances the competitiveness of Indian goods in Myanmar and other Southeast Asian markets.

Economic Growth and Development: ICP Moreh helps to foster economic growth by







Cargo Handling at Moreh ICP





Passenger Terminal at Moreh ICP

generating new opportunities for trade and investment. It helps to generate jobs and enhance infrastructure development in Manipur and surrounding areas which has been economically underdeveloped compared to other parts of India.

## Agencies and Facilities at ICP Moreh

Customs, LPAI and Immigration: The post has dedicated facilities for customs and immigration processing, which makes it easier to monitor and regulate the movement of goods and people across the border. A total of twenty- seven staff have been posted in ICP Moreh. However, because of the current internal security situation in Manipur and Myanmar, the effectiveness of the ICP is affected to a certain extent.

Warehousing facilities allow for the storage of goods, ensuring that they are handled and

processed efficiently.

Quarantine Services are available to inspect animals and plants, which is important for preventing the spread of diseases across the border.

Cargo Handling: The post is equipped with cargo handling facilities, allowing for efficient

Activities carried out through
Moreh land Port include Malaysians
World Tour & Sangai Festival 2019
under which Myanmar Sub Junior
football team visited India through
Moreh Land Port.



loading, and unloading of goods; which helps to reduce delays and improve trade efficiency.

Passenger Terminal caters to people crossing the border, enhancing convenience for travelers, and ensuring efficient processing.

#### Trade and other Activities

After its inauguration, the ICP at Moreh has not seen much light of the day due to various issues in both the countries that have plagued its potential and proper functioning.

Post COVID-19 lockdown, around 346 people were repatriated to India and around 366 people were repatriated to Myanmar through ICP, Moreh. The ICP, Moreh has seen the export of 123 Tons to include High Speed Diesel (HSD) Oil, Automobile Spare Parts, Construction machinery and materials whereas the import was restricted to 21 tonnes of cementonly. This accounted for the total transaction of around 542 Crore rupees.

Earlier the trade was happening through barter system which was abolished by the Indian Government on 01 December 2015.

## Challenges Faced

While ICP Moreh has made significant progress in improving border management and facilitating trade, several challenges remain. These include: -

Staff: Due to the current IS situation, most of the staff being of Meitei community had to leave the station and shift to Imphal thereby creating a crunch. The ICP was devoid of its staff since the eruption of conflict. However, with the situation remaining less tense there has been steady increase in staff, but the main concern remains i.e., the full time ICP Manager, Customs SP and the immigration officer in-charge are either not posted or they have been given multiple responsibilities thus reducing their availability.

Situation Across Border: Myanmar is in turmoil since last few years due to military coup. This has led to unstable governance in the country because of which the government offices are not functioning as usual. This has led to decline and depletion of trade from Myanmar's side. The customs and border authorities are not available to carry out the trade, thereby leading to a potential financial loss. Hence, it is necessary to strengthen cross-border coordination and streamlining processes on both sides of the border to achieve the full potential of the ICP at Moreh.

ICP Moreh represents a crucial component of India's efforts to improve its border infrastructure, facilitate trade, strengthen ties, and show its presence in Southeast Asia. Though it is a state-of-the-art facility and streamlined processes, ICP Moreh has not been able to expand its wings due to a few reasons. It is required that the officials of India and Myanmar, plan for restarting of trade to generate economic benefits and fostering regional connectivity.

As part of the Act East Policy, ICP Moreh supports India's ambition to become more integrated with ASEAN, providing new trade and economic opportunities for India's northeastern states. With the minor amendments and adjustments, it is possible to drive the ICP to its full potential. While challenges remain, the continued development of ICP Moreh holds great promise for fostering greater economic and cultural cooperation between India and Myanmar.

Article by: Lt. Gen R K Rana, SM, VSM, Director General, Assam Rifle Co – author: Shri Sachin Kumar, Lieutenant Colonel, Assam Rifle

# Inclusive Growth through Gender Equality

Women's active engagement in international trade and logistics industry iscrucial for advancing gender equality and inclusivity. Empowering women is a key driver of economic and social development, central to the 2030 Agenda for Sustainable Development. When women are given equal opportunities, they contribute to more sustainable practices, aligning with SDG#5 (Gender Equality) by empowering women across all sectors, SDG#8 (Decent Work and Economic Growth) through inclusive and productive employment, SDG#9 (Industry, Innovation, and Infrastructure) by strengthening innovation and infrastructure development, and SDG#12 (Responsible Consumption and Production) by promoting sustainable practices and improving resource management.

Studies show that addressing gender gap in employment and entrepreneurship could increase global GDP by over 20% (World Bank, 2024). In sectors like international trade and logistics, women's participation is less. Women bring fresh insights that optimize operations, drive innovation, and contribute to broader sustainability goals, such as reducing emissions, enhancing safety, and building resilient communities.

# Challenges in Achieving Gender-Inclusive Growth

Achieving gender equality and inclusive growth is hindered by deeply rooted cultural, social, and economic challenges that limit the participation of women and marginalized groups in key economic sectors. Cultural and social norms often prevent women from this subcontinent in accessing leadership roles, reinforcing stereotypes and barriers to equal opportunities. Moreover, many women face significant obstacles in accessing essential services such as education, healthcare, and financial independence. The lack of necessary infrastructure; including safe workplaces, childcare facilities, and gender-friendly public spaces, further complicates the balance between work and personal responsibilities. These challenges are particularly severe in South Asia, where female

labour force participation rate (FLPR) is alarmingly low at just 22% compared to 77% for men, emphasizing the need for targeted interventions to dismantle these barriers (World Bank, 2022).

In the trade and logistics sectors, women's underrepresentation weakens efforts to achieve sustainable growth. Women are often relegated to lower-level, lower-paying roles in the trade supply chain, limiting their contributions to higher-value positions and decision-making. According to the Global Survey on Digital and Sustainable Trade Facilitation Report 2023, only 38% of measures to enhance opportunities for women in trade facilitation have been implemented globally, revealing a critical gap in policies and initiatives (ESCAP, 2023). Addressing these gaps requires genderresponsive approaches and inclusive infrastructure that empower women at every level of the supply chain innovation, and contribute to broader sustainability goals, such as reducing emissions, enhancing safety, and building resilient communities.

### Initiatives and Measures for Gender-Inclusive Growth at Land Ports

Recognizing the historically male-dominated trade and logistics industry, LPAI has prioritized advancing gender mainstreaming across the entire value chain. In alignment with Action Point 27 of the National Trade Facilitation Action Plan (2020–2023), LPAI is proactively addressing structural and systemic challenges to promote equitable participation. By encouraging greater female representation in diverse roles at land ports, LPAI has made gender mainstreaming a cornerstone of its operational strategy of inclusive trade.

Gender Toolkit: LPAI has developed a Gender Toolkit, building upon the framework created by the Mahila Housing Trust (MHT), to assess the current level of gender inclusivity at land ports and how to make land ports gender friendly. The toolkit has been developed through extensive research and data collection to identify the

unique challenges and needs of women in the trade and transport sectors. It incorporates an objective scoring index, ranking all land ports on a scale from 0 to 1, based on four key dimensions: Institutional Mainstreaming, Accessible Infrastructure, Stakeholder Servicing, and External Environment.

Gender-Sensitive Action Plan: LPAI has developed comprehensive set of short, medium, and long-term actionable strategies to integrate gender mainstreaming into its operations, with the goal of making all land ports across India 100% gender-friendly by 2027; prioritizing safety, security, and inclusivity. The Gender-Sensitive Action Plan outlines a phased implementation strategy, tailored to the specific infrastructure, cargo and passenger flow, and surrounding ecosystem of each land port. It targets seven key indicators: addressing womenand child-friendly needs, creating genderfriendly workplaces, promoting women's economic empowerment, enhancing public amenities and welfare facilities, ensuring safety measures, and strengthening staff capacity building.

compliance with POSH Act, 2013 and Gender Mainstreaming Standard Operating Procedures (SOPs) for integrating gender considerations into decision-making, and enhance capacity for gender analysis, planning, and evaluation. These reforms are complemented by practical measures, such as the provision of maternity leave and safe shuttle services, to create a conducive and supportive workplace for women at land ports. By leveraging evidence-based research and data collection—such as sex-disaggregated data—LPAI ensures that its initiatives are informed,



Mental Health Workshop



### Gender Sensitization workshop

Institutional Reforms: LPAI has been implementing progressive policies that mandate at least 30% female workforce participation, revise hiring practices for outsourced staff, and ensure robust mechanisms like the formation of Internal Complaints Committees (ICC) in

measurable, and aligned with real-world genderspecific challenges and opportunities.

Gender-Sensitive Infrastructure: LPAI invests in gender-sensitive infrastructure, addressing the unique needs of women by enhancing safety, hygiene, and accessibility. Initiatives like dedicated female security staff rooms, restrooms, CCTV monitoring, help desk, lactation and hygiene facilities and emergency panic buttons demonstrate a deep commitment to creating secure and enabling environments for women. Infrastructure improvements also extend to cargo terminals, ensuring inclusive spaces that foster equal opportunities for participation in logistics and trade-related activities.

Capacity-Building and Training Programs: Comprehensive capacity building and training is integral to LPAI's approach for promoting inclusivity and operational efficiency. Its emphasis on capacity-building initiatives highlights its dedication to sustainability and inclusion.



Anti-Human Trafficking and Zero Tolerance for Harassment Workshops

LPAI also organized Gender Sensitization Workshops, Mental Health Workshop, Health and Social Security Camps. LPAI's efforts to combat exploitation are reinforced through Anti-Human Trafficking and Zero-Tolerance Workshops, demonstrating its proactive role in promoting gender equity. Additionally, programs like driver training and road safety education were also organized to encourage women to assume leadership positions in logistics, further advancing a sustainable and equitable environment.

LPAI has conducted a **Training Program on POSH** to establish a clear, responsive, sexual harassment policy and grievance redressal mechanism to manage reporting on sexual harassment for staff, workers, visitors, and

passengers.

Also, a two-day annual training for ICC members was organized by LPAI featuring a series of insightful sessions designed to foster a deeper understanding of gender responsiveness and inclusivity within the workplace. As a part of the training, an ICC Workbook was also released by LPAI.

Skill Development Programs: LPAI is actively developing Skill Development Training Programs



Annual training on Enhancing Awareness and Action: Internal Complaints

in collaboration with District Skill Development Officer for economically and socially underprivileged girls and women residing within a 40-50 km periphery of land ports. These programs are designed to provide meaningful opportunities for employment and income generation, enabling participants to enhance their livelihoods. The initiatives focus on empowering women and strengthening their capacities to excel in diverse roles. Key components include rural youth training, weaving and handloom, women's



Skill Development Training to local community

empowerment through Self-Help Groups (SHGs), entrepreneurship development under government schemes, and training in banking loans and credit management, among other areas.

Governments, organizations, and individuals must collectively prioritize gender-inclusive policies and practices to achieve sustainable development and advance gender mainstreaming at all levels. By implementing progressive reforms, developing gender-sensitive infrastructure and creating targeted capacitybuilding and training programs, LPAI demonstrates a tangible commitment to gender mainstreaming. These efforts not only empower women through equitable access to opportunities but also create safe, secure, and supportive environments that foster growth and success. It is important to recognize that gender equality is not just a moral imperative but also an economic necessity. Achieving gender equality is integral to sustainable development, as it enhances workforce participation, strengthens

organizational efficiency, and drives economic resilience. Advancing gender equity enhances workforce participation, improves organizational outcomes, and drives economic resilience. LPAI's initiatives stand as a model for how institutional reform and systemic interventions can contribute to building a more inclusive, equitable, and forward-looking logistics and transport ecosystem, ultimately benefiting society and the economy.

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# LPAI's commitment to Human Capital Management

# **Building Ports, Building Competencies**

At the Land Ports Authority of India (LPAI), we firmly believe that the future of India's land ports is not solely built on brick and mortar, but on the strength, agility, and competencies of its people. Our guiding principle is simple yet profound: Building Ports, Building Competencies. As the world moves towards an increasingly interconnected and globalized future, India's strategic position as a trade hub is more crucial than ever. However, infrastructure alone cannot drive this vision; it is the human capital that fuels success. In this journey, LPAI has placed learning and development (L&D) at the very heart of its strategy, ensuring that the workforce is not only prepared to meet the challenges of today but also equipped to navigate the opportunities of tomorrow.

shaping the workforce of the future. LPAI's learning journey started with the First Employee Orientation Program at Land Port Attari, where the focus was on instilling an understanding of the organization's ethos and operational framework. This program marked the first step in what has now become a broader organizational vision to transform LPAI staff into leaders in their respective domains, equipped with the knowledge and skills necessary for efficient and effective border management. As LPAI evolved, so did its training programs, which expanded beyond the fundamentals of operational readiness to encompass a holistic approach to professional development—one that addresses mental wellbeing, emotional resilience, leadership skills, and team building.

# Transformative Learning at LPAI

India's growth as a global trade powerhouse requires a workforce that is not only skilled in its specific roles but also possesses a strategic vision, adaptability, and resilience. Over the past year, LPAI has set a new benchmark in employee training, creating an ecosystem of learning that transcends traditional boundaries. With the complex demands of cross -border trade, national security, and infrastructure management, LPAI's workforce needed to evolve in tandem with these changes. This vision has culminated in the creation of a comprehensive, dynamic, and results-driven training strategy aimed at











# Thematic Training Initiatives: Bridging Knowledge Gaps

# Safety and Security Training: The Backbone of LPAI Operations

Safety and security are the bedrock upon which LPAI's operations stand. A commitment to securing the integrity of India's borders and ensuring the safe passage of goods and passengers has driven LPAI to partner with the

best institutions in the country for specialized training. Some of the key initiatives include:

NISA Hyderabad: Providing advanced training in surveillance, access control, and security protocols.

National Fire Service College, Nagpur: Delivering comprehensive fire safety training with a focus on emergency response procedures.

National Safety Council, Mumbai: Conducting sessions on safe handling and transportation of hazardous goods, which are critical to mitigating potential risks at land ports.

# Disaster Management: Preparing for the Unexpected

Understanding the unpredictability of crises, LPAI has partnered with the National Disaster



Response Force (NDRF) to conduct hands-on training in disaster preparedness and emergency response. The NDRF's intervention at the LPAI Training Centre in Agartala has empowered the workforce with the skills needed to navigate a crisis with composure and efficiency. Through simulations and practical exercises, the staff is now better prepared to manage any disaster situation that may arise, enhancing LPAI's ability to respond rapidly and effectively.

### Gender Mainstreaming: Fostering Inclusivity

At LPAI, inclusivity is not just a policy—it is woven into the very fabric of the organization. LPAI is committed to ensuring that gender equity is not just an ideal, but a practice embedded in every aspect of its operations. Workshops on gender sensitivity and inclusiveness have been a regular part of the training schedule, ensuring that employees are not only aware of but also actively engaged in promoting a respectful and equitable work environment. In Agartala, a specialized workshop for the Internal Complaints Committee (ICC) provided in-depth insights into gender mainstreaming and inclusiveness, enabling committee members to take proactive steps in promoting gender equity. Gender sensitization

programs at various land ports have ensured that all stakeholders, including external partners, are sensitized to issues of gender equity.

#### Mental Well-Being: Strengthening the Emotional Core

Recognizing that mental well-being is a key component of professional success, LPAI has prioritized the mental health of its employees through stress management and mental health workshops. These workshops have equipped staff members with coping strategies and tools to handle high-pressure scenarios, ensuring that they remain resilient, focused, and motivated. In an environment where operational efficiency and emotional balance go hand in hand, mental well-being has become integral to LPAI's success.

# Specialized Domain-Specific Trainings: Tailoring to Operational Needs.

LPAI's training programs are tailored to the specific operational needs of its workforce. Some of the bespoke initiatives include:

Engineering Excellence: From Blueprint to Border: In collaboration with the School of Planning and Architecture (SPA), New Delhi,



Indian Technical and Economic Cooperation Training

this program focused on the development of smart, green, and resilient land ports. The training covered all aspects of master planning for infrastructure and sustainable building practices, ensuring that LPAI staff are prepared to design and construct cutting-edge ports.

Land Ports and Cross-Border Trade
Facilitation: Conducted by IIFT Delhi, this
training explored the intricacies of global supply
chains and the crucial role land ports play in
facilitating cross-border trade. The program
provided invaluable insights into trade
facilitation, ensuring that LPAI staff are
equipped to navigate the complexities of
international trade policies.

These initiatives underscore LPAI's commitment to aligning its training with its operational priorities, ensuring that its workforce is prepared for the future of cross- border trade and logistics.

# LPAI-ITEC Initiative: Diplomacy Through Training

LPAI's collaboration with the Indian Technical and Economic Cooperation (ITEC) program has proven to be a game- changer, not just in terms of training but also as a tool for diplomacy and regional integration. Two training programs on 'Engineering Excellence: From Blueprint to Border' and 'Land Ports and Cross-Border Trade Facilitation' were delivered under this initiative, bringing together 40 foreign participants from Bangladesh, Bhutan, Nepal, Sri Lanka, and South Sudan.

These programs went beyond mere knowledge sharing. They also facilitated deeper collaboration among regional nations, fostering a shared commitment to efficient trade, security, and connectivity. Through this initiative, LPAI has positioned itself as a leader in cross-border infrastructure, leveraging training as a tool to strengthen regional ties and promote India's leadership in the global trade ecosystem.

# Academic Partnerships: Empowering Through Knowledge

LPAI has strategically partnered with esteemed

academic institutions such as IIM Ahmedabad; IIM Indore; IIM Shillong; IIFT Delhi; National Fire Service College, Nagpur; School for Planning and Architecture, Delhi; National Safety Council Mumbai and Institute for Road Transport Education, Faridabad. These partnerships bring the best academic minds and world-class expertise to LPAI's workforce, ensuring that the staff remains at the cutting edge of the latest trends in border management, trade facilitation, and infrastructure development. By leveraging the intellectual capital of these institutions, LPAI has empowered its workforce to not only meet contemporary challenges but to lead in innovation and thought leadership.

### Digital Learning Through Karmayogi Bharat

LPAI's training landscape has been transformed through Karmayogi Bharat, a dynamic digital learning platform. With over 85% of staff onboarded and more than 12,000 courses completed across diverse domains, the platform has redefined continuous learning at LPAI. Boasting an 86% course completion rate, it reflects strong staff engagement in professional development. In collaboration with the Capacity Building Commission, LPAI is developing domain-specific online courses tailored to its unique needs. Additionally, LPAI has curated a specialized training suite, offering over 29 hours of targeted behavioural and functional skills development. Combining traditional and flexible, self-paced learning, the platform empowers employees to access knowledge anytime, anywhere, revolutionizing personal and professional growth at LPAI.

### MasterCLaaS and Port-side Chats: Thought Leadership and Continuous Learning

The MasterCLaaS Lecture Series has emerged as a powerful platform for LPAI's staff to engage with global experts and thought leaders on emerging trends in trade, logistics, and infrastructure. Through these lectures, LPAI encourages a culture of continuous learning and thought leadership, empowering employees to think beyond immediate operational challenges and focus on the bigger picture. Soon to be launched, the Port-side Chats podcast series will



MasterClass session by experts from Center for social & economic reforms

further amplify this learning culture, providing staff with easy access to discussions on topics such as passenger experiences, safety, and trade facilitation. These initiatives ensure that learning remains dynamic, relevant, and engaging for every LPAI employee.

# A Learning Hub: The Residential Training Centre, Agartala

The Residential Training Centre in Agartala has become the heart of LPAI's immersive learning experience. Equipped with state-of-the-art facilities, the centre hosts workshops on disaster



Gender Mainstreaming workshop at LPAI Headquarter

management, gender sensitization, and operational best practices. The immersive environment ensures that participants can apply theoretical knowledge to real-world situations, enhancing their readiness and confidence in executing their roles effectively.

## The Road Ahead: Investing in Progress

As LPAI continues to grow and evolve, the commitment to building competencies within its workforce remains unwavering. Knowledge, in all its forms, is the cornerstone of LPAI's operational excellence. By continuing to invest in its people, LPAI is not only creating a workforce that is highly skilled and motivated, but also laying the groundwork for stronger regional cooperation and greater leadership in global border management. The future of LPAI is not just about building ports; it's about building the human capital that connects those ports, faster, farther, together. The journey ahead is one of continuous learning, growth, and progress—ensuring that LPAI remains at the forefront of innovation, excellence, and connectivity in India and beyond.

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# **Kartarpur Sahib Corridor**

# LPAI creating safety passage for religious tourism.



View of the Sikh shrine of Guru Nanak Dev Ji in Kartarpur, Pakistan

The Land Port Dera Baba Nanak stands as a gateway of both spiritual significance and diplomatic cooperation. This border crossing facilitates access to one of the most cherished pilgrimage sites for the Sikh community-Gurudwara Darbar Sahib in Kartarpur, Pakistan. Through the Kartarpur Corridor, a unique visa-free initiative, Sikhs from around the world can visit this revered site where Guru Nanak Dev Ji, the founder of Sikhism, spent his final years.

The opening of the Kartarpur Corridor on 09 November 2019 marked a historic moment, not only for the millions of Sikh devotees but also for the bilateral relations between India and Pakistan. At the helm of this operation is the Land Port Dera Baba Nanak, managed by the Land Ports Authority of India (LPAI), which ensures that pilgrims experience seamless transit while preserving the sanctity and cultural

heritage of the site.

This article illustrates detailed workings of Dera Baba Nanak Land Port, highlights on the challenges and accomplishments of managing project, and shares real-life stories from pilgrims whose lives have been profoundly impacted by the Kartarpur Corridor.

# The Cultural and Religious Significance of Dera Baba Nanak

Dera Baba Nanak, nestled in the Gurdaspur district of Punjab, holds a unique place in Sikh history. It is from here that pilgrims embark on a spiritual journey to Kartarpur Sahib, located just across the border in Pakistan. Gurdwara Darbar Sahib Kartarpur, one of the holiest sites in Sikhism, is where Guru Nanak Dev Ji established a community and spent the last 18 years of his life, imparting teachings of equality, selflessness, and humility.

For decades, the desire to visit this sacred site was stifled by the geopolitical barriers that divided India and Pakistan. However, the Kartarpur Corridor, inaugurated just before the 550th birth anniversary of Guru Nanak Dev Ji, transformed this dream into reality. Pilgrims can now travel visa-free from Land Port Dera Baba Nanak to Kartarpur Sahib, with minimal documentation requirements and a streamlined process. This initiative not only deepens religious ties but also fosters a spirit of peace and understanding between neighbouring countries.

# Managing the Land Port: A Unique Challenge

For the Manager of Land Port Dera Baba Nanak, the responsibility of overseeing the daily operations of this crucial transit point is both a privilege and a challenge. Every day, hundreds of pilgrims from across the globe pass through the port, all seeking a spiritual connection. The team at DBN ensures that this journey is smooth, dignified, and in alignment with the sanctity of the occasion.

Operational Efficiency and Security Managing a land port at an international border comes with its own set of challenges, especially when the purpose is religious tourism. From the moment a pilgrim enters the port, the process is designed to ensure efficiency and security. LPAI has integrated modern technologies to handle documentation, maintain security, and facilitate pilgrim services. Biometric scanning, electronic visa verification and seamless customs procedures by Bureau of Immigration and Indian Customs respectively are employed to minimize delays, ensuring that pilgrims can focus on their spiritual journey.

The port operates under high-security protocols to ensure the safety of the pilgrims, with security personnel, surveillance systems, and close coordination between Indian and Pakistani authorities. While ensuring safety is paramount, it is equally important to maintain an atmosphere of peace, respect, and ease, allowing pilgrims to feel welcomed and respected during their journey.

Infrastructure and Amenities: To accommodate the needs of many pilgrims, the port is equipped with essential amenities, such as a full – fledged passenger terminal, waiting lounges, medical facilities, and dedicated prayer rooms. Pilgrims are greeted with hospitality and given clear guidance on the necessary documentation and procedures. The terminal also features a small exhibition space dedicated to the life and teachings of Guru Nanak Dev Ji, adding an educational aspect to the pilgrim's experience.

Collaborative Efforts: Coordinating with various government agencies, both Indian and Pakistani, is essential for the smooth functioning of the port. Regular cross-border meetings are held with BSF and Pakistani Rangers to discuss operational issues, troubleshoot challenges, and ensure the continuous improvement of services offered at the port. These efforts reflect the larger goal of maintaining harmonious relations while respecting the sentiments of the millions who revere Kartarpur as a holy site.

### Real-Life Stories: Pilgrims' Voices

Among the many heart-warming stories that emerge from Land Port Dera Baba Nanak, several stand out as testaments to the profound emotional and spiritual impact of the Kartarpur Corridor.

One such story is that of Harjit Singh, a 65-year-old farmer from Amritsar, who had long dreamed of visiting Kartarpur Sahib. Harjit's family had been separated during the Partition of India, and visiting this holy site was a deeply personal pilgrimage, symbolizing not just his devotion to Guru Nanak but also his longing to reconnect with his ancestral roots. After returning from Kartarpur, Harjit shared how standing in front of the Gurdwara brought tears to his eyes, calling it the "culmination of a lifelong dream."

Another moving account comes from Jasbir Kaur, a Canadian Sikh who travelled to India with her family specifically to visit Kartarpur. Despite living abroad for decades, her connection to Sikhism remained strong, and Kartarpur had always been on her "bucket list."

The journey was a chance for her to introduce her children to their heritage. She said, "It was more than just a visit; it was an opportunity to connect with our history, our Guru, and our identity".

#### The Future of Land Port Dera Baba Nanak

As we look toward the future, the potential of Land Port Dera Baba Nanak extends beyond religious tourism. The success of this corridor highlights the importance of cultural exchange and the role that such initiatives play in promoting peace and unity across borders. Prioritizing the enhancement of services and infrastructure at the port to cater to an

increasing number of pilgrims and offer them an enriching and dignified experience is a key focus for the coming years.

Plans are underway to further develop tourism infrastructure around Dera Baba Nanak, including eco-friendly accommodations, cultural centre, and heritage walks that will allow visitors to explore the rich history and traditions of the region. As we continue to build on the success of the Kartarpur Corridor, our goal is to position Dera Baba Nanak as a global centre for spiritual tourism and cultural exchange.

For the millions of Sikhs and other Indians around the world, it represents a lifeline to









Security Measures: BSF Security personnel conducting bag checks, luggage scanning, and frisking checks.







Customs Clearance: Customs officers inspecting goods and handling declarations



Control Room: BSF officers & JE (Elect) of LPAI monitoring the port from a centralized control room

their spiritual home, and for LPAI, it is a privilege to facilitate this connection.

As LPAI moves forward, its commitment remains steadfast: to maintain the sanctity of the pilgrimage, promote cultural tourism, and strengthen the bonds between communities across borders.

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Co – Author: Shri Balwant Singh and Mr. Dipankar from DBN Land Port







Traveller Experience Facilities and Comfort at ICP:

Photos of the amenities provided to travellers,

- SBI Forex Exchange Counter,
- Polio Vaccination to Pilgrims,
- Waiting Areas, Restrooms,
- Food Court and
- information boards







## Standardisation and modularisation of land ports

## Revamping land port development

Since its inception in 2012, Land Ports Authority of India (LPAI) has been undertaking large scale development for establishing various land ports located at Bangladesh, Nepal, Bhutan, Myanmar and Pakistan border. Currently, LPAI has 15 operational land ports facilitating smooth passenger and cargo movement.

Through LPAI's experience of border infrastructure development of over a decade, it has been observed that buildings, facilities and services at land port varies in size, number, availability and scale as per their unique requirements. While existing land port infrastructure is handling all operations effectively, but it is important to reflect on adequacy of land port infrastructure considering current and future demand. As seen in other sectors, standardisation of development norms of infrastructure largely addresses this specific point which not only results in standard infrastructure but also a same set of level of experience for the users

#### **Industry Practice**

#### Railway

Indian railways (IR) were one of the first to introduce "Manual for standards and specifications for railways" in 2009. It emphasized use of planning and design principals in infrastructure development along with providing guidelines on platform design, station design, station services etc. In addition, IR has norms in place for provisioning of various passenger amenities based on category of stations, peak hour passengers etc.

#### Aviation

International air transport association (IATA), a trade association of world's airlines, supports global airlines to develop standards for promoting aviation security among others. In Indian, we have Ministry of Civil Aviation (MoCA), Director General of Civil Aviation (DGCA), Airports Authority of India (AAI) developing norms of ensuring safety and smooth experience of users. They have issued norms for sizing domestic or

international terminals based on peak hour passengers benchmarking global practices.

Furthermore, there are various other government agencies like Ministry of Road Transport and Highways (MoRTH), Bureau of Indian Standard (BIS), Military Engineering Services (MES), Ministry of Housing and Urban Affairs (MOHUA) etc. have published norms for development such as National Building Code (NBC), Indian Road Congress (IRC) standards, MES guidelines, Urban and Regional Development Plans Formulation and Implementation Guidelines (URDPFI) etc.

#### Modular Construction case study: Redevelopment of Chandigarh railway station

The station redevelopment project aimed at modernizing the railway infrastructure in India. Launched in January 2023, the project employs a modular construction method. This approach aims to minimize construction time and disruption to ongoing railway operations. A 12m x 12m grid system has been adopted, enhancing efficiency and quality control throughout the construction process. It also emphasizes sustainability by reducing on-site waste and energy consumption, aligning with green building strategies. A specialized 80-meter crane is being utilized to lift prefabricated materials efficiently. This crane is critical for maintaining construction pace without disrupting daily operations at the busy station. The Chandigarh Railway Station redevelopment project exemplifies a forward-thinking approach to infrastructure creation.

# Modularisation of land port infrastructure for faster development

Modularization of infrastructure is one of the proven ways in which the efficiency and quality control of construction can be ensured. It is essentially the process of installing individual infrastructural components off-site and then assembling them on the location of the



construction site, thereby reducing overall time cost and time involved.

Given, LCS upgradation of 66 LCS into land ports phased over 10 years and three phases where in 26 LCS are being upgraded in Phase A. Modular infrastructure development could be one of quickest way to provide standard facilities and services at these ports.

#### Envisaged development norms for LPAI

LPAI has prepared norms for the development of infrastructure & facilities in Land Ports based on its border infrastructure creation experience of over a decade and industry prevalent norms. It provides guidance on sizing of buildings and structures based on key parameters peak hour passenger, trucks per hour etc. In addition, provisions for equipment and services for ensuring safety and security while facilitating smooth passenger and cargo movement. Land port Infrastructure and services have been divided into following parts for creation of infrastructure addressing all needs of stakeholders:

- Passenger oriented zones
- Trade oriented zones
- Administrative zone

- Accommodation
- Centralized utilities and facilities
  In this manner, development of all land ports can
  follow a standardised approach, and infrastructure
  can be built as per varying scale of development
  required without compromising on level of
  service.
- Advantage of standardised development
- Convenient and adequate amenities
- Operational readiness and efficiency
- Enhanced security across all land ports
- Administrative approval ease in pre-development stages
- Cater to existing and future needs during design period
- Promotes uniformity and scalability

#### **Current Status**

Land port infrastructure development norms is under vetting by technical advisors. Afterwards, it will be submitted to Ministry of Home Affairs for review and approval.

Article by: Shri Sanjeev Gupta, Member (P&D), LPAI Co – Author: Shri Harsh Sharma & Shri Ravinder Singh, Strategic Support Unit -LPAI

#### Cross Border Trade

## LPAI creating a secured safe Trade Junction

India's expansive frontiers with Afghanistan, Bangladesh, Bhutan, China, Myanmar, Nepal and Pakistan present significant prospects for cross-border commerce, a crucial component of economic exchange among adjacent nations. Land ports serve as an organized gateway for the movement of goods and people across international borders. They are equipped with facilities for customs clearance, immigration control, and logistical support. The role of land ports extends beyond mere transit points; they are essential for fostering economic ties between nations and facilitating trade flows.

In India, Land Ports Authority of India (LPAI) was formed in the year 2012 to oversee the development and management of land ports, ensuring that they are equipped to handle increasing volumes of trade. LPAI is responsible for establishment of modern infrastructure at these ports which also stimulates local economies by creating jobs and improving access to markets. The surrounding areas close to land ports, after the port operationalization, have experienced improvements in transportation networks, healthcare facilities, and educational institutions. This interdependence fosters a more robust economic environment that benefits local communities.

#### **Land Ports**

Currently, there are 15 operational land ports in

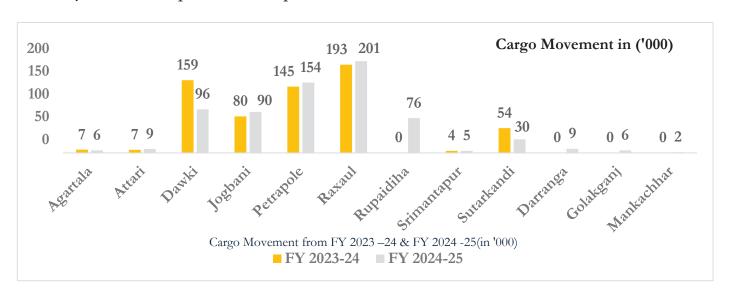
India- 8 along Bangladesh border, 3 along Nepal border, 2 along Pakistan Border and one along Bhutan and Myanmar border each. These Land Ports are pivotal for enhancing trade and passenger transit across its borders.

Petrapole land port in West Bengal at the Bangladesh border is currently the busiest and largest land port in terms of trade volume and passenger movement in India. It lies close to Kolkata connecting India with Bangladesh. Petrapole land port's 100-acre site is crucial for trade, which features extensive parking and warehouse facilities- apart from a modern passenger terminal.

Agartala Land Port, spread over 27 acres, leverages non-intrusive inspection technology and is being revamped for better passenger services. Presently, Land Port Management System (LPMS) is being implemented at Agartala Land Port on pilot basis; which would, in the future, digitalise cargo and passenger movement.

Srimantapur Land Port serves as a cost-effective trade hub with Bangladesh, equipped with mechanized cargo handling. It is the only multimodal connected land port. Sutarkandi Land Port, near river and rail links, is poised for increased trade flow.

Sabroom Land Port is set to offer Northeast



India closer access to the Chittagong and Mongla Sea Port, significantly reducing the distance to maritime trade routes. Dawki Land Port's 23-acre facility supports cargo and tourism in Meghalaya with a comprehensive infrastructure.

Along Nepal border, Raxaul land port in Bihar, covering 235 acres is the major conduit for trade. It is the lifeline of Nepal's trade with India and the rest of the world. Jogbani Land Port, with a 186 acre campus, employs advanced inspection methods to streamline EXIM processes and accommodates substantial vehicle parking. Rupaidiha Land port, spanning across 115 acres started its operation from 10th May 2024. This land port facilitates cargo and Maitri buses for passengers between India and Nepal.

The Attari Land Port, sprawling over 120 acres, boasts of a large parking and warehouse capacity, centralizing stakeholders like Customs and Immigration for efficient operations.

Currently, the Attari Land Port facilitates trade with Afghanistan. Dera Baba Nanak (DBN) Land Port, a socio-cultural hub spread over 15 acres, facilitates pilgrimages to Kartarpur Sahib Gurudwara in Pakistan.

The Moreh Land Port, a key gateway to Southeast Asia, operates on 45.58 acres campus. There is a Free Movement Regime extending up to 10 kms from the border point of Moreh.

These ICPs collectively boost regional trade,

economic cooperation, and infrastructure development.

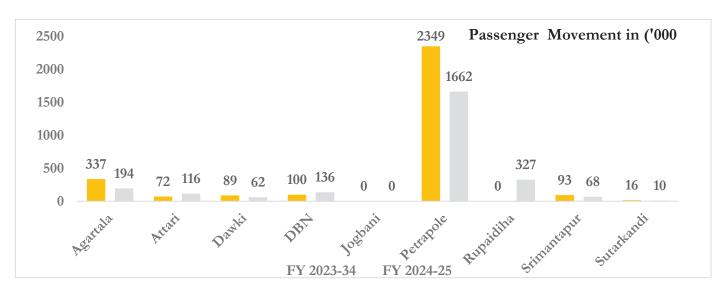
#### Trade and Passenger Movement

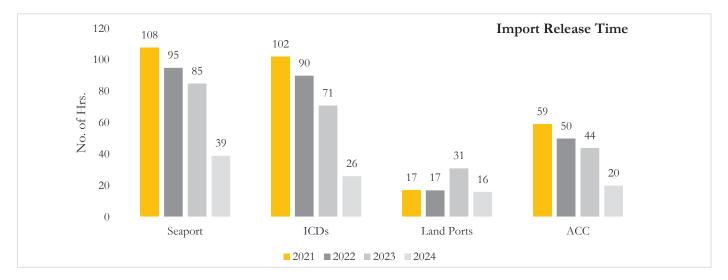
During FY 2024 - 25, the border points between India and its neighbours — Bangladesh, Pakistan, and Nepal—witnessed significant fluctuations in cargo and passenger statistics, reflecting the volatile nature of cross-border trade and travel.

Political upheavals in Bangladesh led to trade disruptions and variable passenger numbers at key landports like Petrapole and Agartala. Meanwhile, Pakistan's border at the Attari land port showed erratic passenger and cargo movements, influenced by geopolitical and economic factors. Rupaidiha saw a notable increase in traffic after its operationalization in May 2024. These trends underscore the complex interplay of regional dynamics on cross-border interactions. In FY 2024 - 25, a total of 6.64 lakh vehicles crossed the border as compared to 6.50 lakh vehicles in FY 2023-24. However, passenger movement saw a drop of 4.79 lakhs from FY 2023 - 24 and witnessed 25.76 lakhs passenger movement in FY 2024 - 25 due to geopolitical factors.

#### Trade Facilitation

Land ports have been dedicated to enhancing services for traders, truck drivers, and other stakeholders, thereby optimizing cargo flow. This commitment has led to a significant reduction in cargo release times, with export durations





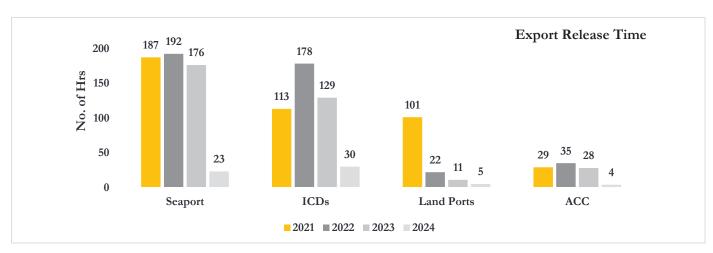
decreasing from 101 hours in 2021 to a mere 5 hours in 2024, and import times being halved from 31 hours in 2023 to 16 hours in 2024.

The key drivers of this efficiency include upgraded infrastructure and integration of technology & automation, which have streamlined operations and minimized manual errors. Regular coordination and collaboration with stakeholders and neighbouring countries have also been instrumental in expediting cargo clearance, contributing to ease of doing business. The implementation of single-window clearance systems, such as the Suvidha initiative in West Bengal and digitization have been pivotal in curtailing transaction times.

To address cross-border activity concerns, port meetings are convened with corresponding land ports. Department of Commerce under the Ministry of Commerce and Industry has set up an Inter-Governmental Committee and a Sub-Committee, chaired by the Secretary – Department of Commerce and Joint Secretary-

Department of Commerce respectively. These committees have been formed to tackle unauthorized trade along the Indo-Nepal border. LPAI participates in these committees to present significant issues and challenges faced on the ground. These committees and subgroups have empowered LPAI to communicate its concerns effectively, leading to betterorganized trade at porous border of India and Nepal and thus enhancing cargo and passenger movement.

The 10th Joint Working Group on Trade between India - Bangladesh, recommended the formation of a Sub-Group on Infrastructure of ICPs/LCSs. The Sub - Group is co-chaired by the Bangladesh Land Port Authority (BLPA) and LPAI Chairpersons. It was formed with the goal of improving the infrastructure at ICPs/LCS. Additionally, LPAI conducts monthly meetings to review the operational status of land ports, focusing on the trade and infrastructure landscape, as well as the challenges and requirements encountered.



These land ports not only improve trade volumes but also strengthen economic cooperation between India and its neighbours, with implications for regional development.

#### Land Ports & Secured Trade

The economic implications of cross-border trade through land ports are profound. Increased trade leads to higher revenue generation for governments through tariff and non-tariff revenue sources. Safe and secured land ports augment cross-border trade. LPAI, currently in its growth trajectory, plans to adopt new technologies and practices that enhance productivity and competitiveness.

Despite the steps undertaken for infrastructural upgradation, LPAI faces several challenges. Security concerns pose significant challenges at land borders. The risk of smuggling and human trafficking activities necessitates stringent security measures that not just synchronizes trade flow, but also creates a secure environment. Balancing security with efficiency is a critical task for authorities managing these ports.

LPAI is committed to modernizing and bolstering border security management. A critical aspect of this vision is implementation of an efficient Access Control system and Surveillance System at land ports, which is currently being developed by LPAI. Various types of cameras such as dome cameras, PTZ cameras and panoramic cameras will be deployed across multiple points to ensure 360-degree surveillance, which can be monitored at the state-of-the-art Command and Control Centre being developed at the ports.

The Land Port Management System (LPMS) has been designed as a single window system to enhance operational efficiency and streamline commerce. It will bring together the Land Ports stakeholders like Traders, Customs House Agents (CHAs), Customs Authorities, Border Guard Forces (BGF), and other Participating Government Agencies (PGAs) within its centralized platform. LPAI is committed to go live with LPMS at Agartala on 30 June 2025.

#### Planned Development

The Land Ports Authority of India (LPAI) remains committed to streamlining cross-border trade and passenger movement by expanding the existing land ports and upgrading land custom stations (LCS) to land ports across the country. As part of its strategic initiatives for FY 2024-25, LPAI is advancing the development of new Land Ports at Banbasa, Sonauli, Bhithamore, strengthening India's border infrastructure and facilitating smoother transit for passengers and vehicles.

In addition to new developments, a significant transformation is underway in West Bengal, where seven existing Land Custom Stations will be upgraded to full-fledged Land Ports to enhance trade and connectivity along India's borders with Bangladesh, Bhutan, and Nepal. The identified LCS for this transition include:

- Jaigaon (Indo-Bhutan border)
- Changrabandha, Fulbari, Ghojadanga, Hili, and Mahadipur (Indo-Bangladesh border)
- Panitanki (Indo-Nepal border)

At present, these sites function as Land Custom Stations, with various stakeholders operating independently. Recognizing the immense trade and passenger movement potential, LPAI aims to integrate all stakeholders under a single, well-coordinated framework to enhance efficiency, reduce bottlenecks, and uplift bilateral trade relations with neighbouring countries.

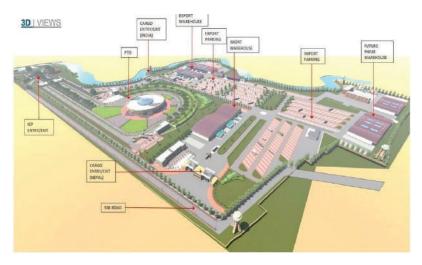
To expedite operations, LPAI is prioritizing the establishment of essential infrastructure, ensuring that all required facilities are in place at the earliest. The transformation of these sites into well-equipped Land Ports will significantly enhance cross-border trade facilitation, improve logistics efficiency, and provide seamless travel experiences for passengers.

Article by Shri Vivek Verma, Secretary, Land Ports Authority of India

Co - Author: Mr. Amit Sharan Singh & Irika Jain, SSU, Land Ports Authority of India

## Strategy in Masterplan

## Design for sustainable and resilient development of Land ports





Passenger Terminal Building Construction of Sunauli Land Port



# Master planning strategy for designing and developing sustainable and resilient land ports involves integrating principles of environmental sustainability, social responsibility, and economic viability, while ensuring the port remains adaptable to future needs and challenges. A comprehensive approach considers both the technical and operational aspects of the port, and the broader environmental and community context. Below is a detailed strategy for achieving this goal:

#### 1. Site Selection and Assessment

1.1. Environmental Impact Assessment (EIA): Begin with thorough environmental analysis of the site, considering aspects like ecosystems, biodiversity, water resources, and potential hazards (flooding, earthquakes, etc.).

- 1.2. Climate Risk Assessment: Evaluate climate change risks, including extreme weather patterns, water-level rise (for ports near river areas), and temperature variations.
- 1.3. Topography and Geotechnical Survey: Ensure the land is suitable for large-scale infrastructure with minimal disruption to the natural landscape.
- 1.4. Social and Economic Context: Assess local population needs, employment potential, land use, and community impact to ensure the port benefits the surrounding area.

#### 2. Resilience and Adaptability

2.1 Modular and Scalable Design: Develop facilities and infrastructure that can grow or adapt based on evolving demand and technological advancements, such as modular

cargo handling facilities and flexible transport connections.

- 2.2. Climate-Resilient Infrastructure: Build with materials and methods that can withstand extreme weather events (flood-resistant terminals, elevated roadways, stormwater management systems).
- 2.3 Backup Systems and Redundancy: Design utilities (power, water, IT systems) with redundancy to maintain operations during disruptions. This includes renewable energy sources like solar and wind, and backup power generation.

#### 3. Sustainability and Green Infrastructure

- 3.1. Energy Efficiency and Renewable Energy: Integrate solar panels, wind turbines, and other renewable energy sources to power port operations. Use energy-efficient lighting and automation systems to reduce energy consumption.
- 3.2. Green Building Certification: Use sustainable building materials and seek certifications such as LEED (Leadership in Energy and Environmental Design) for terminal and administration buildings.
- 3.3. Water Management: Implement rainwater harvesting systems, efficient irrigation, and wastewater treatment plants to

Site Selection and Assessment

Resilience and Adaptability

Sustainability and Green Infrastructure

Social and Community Integration

**Smart and Efficient Port Operations** 

**Transport Connectivity and Integration** 

Regulatory Compliance and Standards

Ongoing Monitoring and Adaptation

reduce the environmental footprint. Integrate permeable pavements and green roofs for better stormwater management.

3.4. Sustainable Transport Solutions: Incorporate electric vehicles (EVs), hybrid cargo handling equipment, and low-emission transport modes. Encourage the use of rail over road for cargo movement to reduce carbon emissions.

#### 4. Social and Community Integration

- 4.1 Community Engagement: Conduct stakeholder consultations and engage local communities early in the design phase to ensure the port meets regional needs and gains public support.
- 4.2 Job Creation and Training: Develop programs to provide local employment opportunities, training for the workforce, and support for the local economy through small businesses and services.
- 4.3 Public Access and Amenities: Create public spaces, green areas, and facilities to promote community engagement and improve the quality of life for surrounding residents.
- 4.4 Health and Safety: Implement best practices for the safety and wellbeing of workers and the local community, ensuring proper air quality, noise control, and minimal environmental impact.

#### 5. Smart and Efficient Port Operations

- 5.1 Automation and Digitalization: Leverage technology to optimize port operations, such as automated cargo handling, smart logistics systems, and data-driven traffic management. Use Internet of Things (IoT) sensors for real-time monitoring of assets and operations.
- 5.2 Data-Driven Decision Making: Employ predictive analytics to optimize logistics flows, reduce congestion, and enhance decision- making processes in port operations and logistics.
- 5.3 Sustainable Supply Chain Integration:

Encourage sustainable practices in the supply chain, such as eco-friendly packaging, sustainable shipping practices, and partnerships with green logistics providers.

#### 6. Transport Connectivity and Integration

- 6.1 Multimodal Connectivity: Design the port for seamless integration with rail, road, and air networks to enhance transport efficiency and reduce congestion. Ensure easy connectivity to urban and rural areas to facilitate economic growth.
- 6.2 Digital Connectivity: Utilize digital platforms for cross-border trade facilitation, customs clearance, and supply chain management to streamline logistics and reduce delays.

#### 7. Regulatory Compliance and Standards

- 7.1 International Standards and Best Practices: Adhere to international standards such as the ISO standards, and local environmental laws to ensure safety, environmental protection, and operational efficiency.
- 7.2 Sustainable Procurement: Use sustainable procurement practices for construction materials and services, selecting suppliers that comply with environmental,

social, and governance (ESG) criteria.

#### 8. Ongoing Monitoring and Adaptation

#### 8.1 Continuous Monitoring Systems:

Implement real-time environmental monitoring (air quality, noise levels, water quality) to ensure compliance with environmental regulations and to adjust as necessary.

8.2 Post-Occupancy Evaluation: After the port is operational, continually assess its environmental and social performance, adapting to evolving challenges such as changing climate conditions, technology shifts, and market demands

#### Conclusion

By focusing on sustainability, resilience, and adaptability, land ports can be designed not only to serve current transportation needs but also to remain flexible and resource-efficient in the long term. Ensuring that all aspects of design—from environmental integration to community engagement—are taken into account will create a land port that is not just efficient and functional, but also socially responsible and capable of adapting to future global challenges.

Article by: Lt. Col. Giteshdeep Singh Sandhu, Director, LPAI



## Building robust land port infrastructure in northeast India

## Elevate Trade Facilitation with Bangladesh

The Land Ports Authority of India (LPAI) manages six operational Land Ports along the Indo-Bangladesh borders. These Land Ports include Petrapole, Agartala, Srimantapur, Dawki, Sutarkandi, and the newly inaugurated Sabroom. Table 1 & Table 2 depict the share of export and import valuation by land ports in the Indo-Bangladesh border. An analysis of the export and import valuations over a five-year period from 2019-20 to 2023-24 reveals a significant variation in the proportion of export and import valuation across different Indian land ports. Table 1 & Table 2 depict the share of export and import valuation by Land Port in the Indo-Bangladesh border. This underscores the importance of continuous monitoring and strategic planning to optimize the efficiency and effectiveness of these crucial trade gateways.

Although export valuation is high in West Bengal (majorly through Petrapole Land Port), it is imperative to note that the valuation of imports is comparatively low in West Bengal. Interestingly, import valuation through the NER states of Assam and Tripura is higher than their export valuation. Therefore, exports are mostly channelled through the land ports of West Bengal<sup>1</sup>. In the year 2023-24, valuation of exports through West Bengal alone was INR 29,638 Crores. In contrary, the export valuation from Tripura and Assam for the same year was INR 10 Crores<sup>2</sup> and INR 6 Crores<sup>2</sup> respectively.

Among India's neighboring countries, Bangladesh shares 4,096 km of land border with India which accounts to 1.16 % of total trade with India. With a population exceeding seventeen crores, Bangladesh presents a significant market for India's exports within the South Asian Association for Regional Cooperation (SAARC) countries.

The eight states comprising the North-East Region (NER) viz. Assam, Arunachal Pradesh, Manipur, Meghalaya, Tripura, Mizoram, Nagaland and Sikkim hold a strategic advantage in strengthening the country's economic ties with neighbouring countries as all these states share borders with one of neighbouring countries i.e. Bangladesh, Bhutan, Myanmar and Bangladesh. This region, often referred to as the gateway to South and Southeast Asia, plays a pivotal role in India's trade network for two key reasons:

Firstly, the NER's strategic location, sharing international borders with several South and Southeast Asian countries, positions it as a crucial hub for regional trade. Among these, Bangladesh stands out as the most significant market for India. The proximity of the NER to Bangladesh and other neighbouring countries offers immense potential for cross-border trade, making the region an indispensable part of India's economic outreach.

Secondly, the NER is endowed with abundant natural resources, which further enhances its importance in India's economic landscape. The region's rich reserves of minerals, forests, and agricultural products provide a solid foundation for economic development and trade. This wealth of natural resources, coupled with the region's strategic location, underscores the NER's vital role in driving India's economic growth and fostering stronger economic ties with bordering countries.

By capitalizing on these advantages, Northeast India can become a key player in India's efforts to boost trade and economic collaboration with its neighbouring countries. Furthermore, building suitable infrastructure tailored to the commodities being traded acts as a catalyst in

<sup>1</sup> Pal, Parthapratim. (2013). Pattern of International Trade through West Bengal: Some Evidence from Port-Level Data. 10.13140/RG.2.1.2341.4887

<sup>&</sup>lt;sup>3</sup> Das, G. LPAI Journal E-issue Article 3. Cross-Border https://lpai.gov.in/sites/default/files/2022-05/Journal\_E- Trade and Infrastructure in India's Northeast Issue\_1.pdf

driving trade growth. Studies have shown that there is a positive association between infrastructure and trade facilitation and volume of trade<sup>3</sup>.

Therefore, LPAI aims to streamline cross-border trade processes, reduce logistical bottlenecks, and lower transportation costs. This strategic investment in infrastructure not only strengthens economic ties with Bangladesh but also contributes to the broader development of the NER, fostering growth, generating employment, and improving the

region's overall economic prospects. Despite the significant potential, the northeast region faces numerous impediments in trade facilitation hindering the economic ties with its bordering countries:

Connectivity: The NER's prominent mode of transport is mostly through roadways with connectivity to the rest of the nation hinging on the Siliguri Corridor also known as Chicken's Neck. This 22-kilometer stretch facilitates trade between India's NER and Bangladesh via Kolkata. Although the

Table 1. Share of Export Valuation by Land Port

In Percent

Sr.	Land Ports	2019 - 20	2020 -21	2021 -22	2022 -23	2023 -24
01	Petrapole	85	71	69	72	77
02	Ghojadanga	9	16	18	15	13
03	Hili	5	9	8	9	8
04	Fhulbari	1	3	4	4	1
05	Sutarkandi	0.356	0.21	0.30	0.06	0.02
06	Agartala	0.001	0.01	0.29	0.27	0.01
07	Srimantapur		0.04	0.30	0.06	0.02

Source: DGCI

Table 2. Share of Import Valuation by Land Port

In Percent

Sr.	Land Ports	2019 - 20	2020 -21	2021 -22	2022 -23	2023 -24
01	Petrapole	69	57	60	69	69
02	Ghojadanga	19	22	27	22	24
03	Hili	2	6	2	1	1
04	Fhulbari	1	3	2	2	2
05	Sutarkandi	5	4	4	2	1
06	Agartala	5	7	4	3	3
07	Srimantapur	1	1	1	1	12

Source: DGCI

Table 3. Statewise share of Trade

In Percent

State		2019	9 - 20	2020	) -21	2021 -22		2022 -23 2023 -		-24	
		Export	Import	Export	Import	Export	Import	Export	Import	Export	Import
01	West Bengal	99.64	90	99.74	87	99.10	91	99.61	94	99.94	95
02	Assam	0.36	5	0.21	4	0.30	4	0.06	2	0.02	1
03	Tripura	0.001	6	0.04	9	0.59	5	0.33	4	0.04	4

Source: DGCI

<sup>&</sup>lt;sup>3</sup> Das, G. LPAI Journal E-issue Article 3. Cross-Border https://lpai.gov.in/sites/default/files/2022-05/Journal\_E- Trade and Infrastructure in India's Northeast Issue\_1.pdf

corridor's current situation underscores some challenges like heavy cargo congestion and subsequently escalating transportation costs and consumer prices, there are ample opportunities to improve trade efficiency<sup>4</sup>.

Physical Infrastructure: Availability of physical infrastructure like electricity, communication and transportation is sporadically distributed between rural and urban areas<sup>5</sup>. Approximately one-third of the national average (488 kWh in 2021) is the per capita energy consumption in the northeast, making it the lowest in the nation<sup>6</sup>. Despite the NER's enormous potential to generate hydroelectricity, its development has been hampered by a lack of suitable infrastructure.

Difficulty in value chain: A normal agricultural or horticultural product value chain comprises farming, crop procurement, storage, processing, and marketing. There are difficulties at every point in this value chain in NER. Farmers use technology at a limited rate because they do not have access to sufficient funding or infrastructure assistance<sup>7</sup>.

Law and order: Security issues in the NER are still present due to cross-border disputes and other illicit activities in the area.

Therefore, addressing these challenges can leverage potential economic prospects with its bordering countries.

NER has a natural comparative advantage on industries like horticulture, agro-processing and textiles, hence such industries, if augmented, can not only generate domestic demand but also serve the external market<sup>8</sup>. Table 4 highlights some of the key sectors of the Northeast.

The export profile of the NER to Bangladesh is notably distinct from the major exports from the rest of India to Bangladesh. The NER primarily exports raw materials such as coal, limestone, boulders, and Agri-horticultural products like ginger and citrus fruits. In contrast to exports, imports from Bangladesh include finished goods like cement, synthetic fabrics, ready-made garments, and processed foods.

The trade paradigm between India and Bangladesh is characterized as India importing higher-value finished products and exporting lower-value raw materials to Bangladesh. The country relies on the North - Eastern Region (NER) of India for essential mineral resources such as coal and limestone, which are not available domestically. Due to the underdeveloped manufacturing sector in the NER, the region imports manufactured goods from Bangladesh in exchange5. This reflects the industrial strengths and economic strategies of both nations. This mutually beneficial arrangement allows Bangladesh to access necessary inputs for its industries, while India benefits from importing finished products, fostering economic interdependence and growth for both countries.

However, trade valuation through land ports has reduced consistently over the past couple of years from NER to Bangladesh. Table 5. illustrates a negative valuation in trade from 2019 to 2023 within the land ports in the NER

<sup>&</sup>lt;sup>4</sup> https://blogs.worldbank.org/en/endpovertyinsouthasia/northeast-india-all-roads-lead-greater-development

<sup>&</sup>lt;sup>5</sup> De, P., & Majumdar, M. (2014). Developing Cross-Border Production Networks between Northeastern Region of India, Bangladesh and Myanmar: RIS Research and Information System for Developing Countries a Preliminary Assessment. https://www.sasec.asia/uploads/publications/prabir-de-developing-cross-border-production-networks.pdf

<sup>&</sup>lt;sup>6</sup> National Seminar on Promotion of Clean Energy Access in Northeast India Proceedings. (n.d.). Retrieved August 26, 2024, from https://cdn.cseindia.org/attachments/0.00194700\_1689074645\_event-proceedings.pdf

 $<sup>^7</sup>$  Saha, R., & Bhowmick, S. (2021). Enhancing Trade and Development in India's Northeast. https://www.orfonline.org/public/uploads/posts/pdf/20240409150842.pdf

<sup>&</sup>lt;sup>8</sup> Dhar, B., De, P., Das, G., & Singh, E. Bijoy. (2011). An Assessment of the Opportunities and Constraints Expansion of Northeast India's Trade and Investment with Bangladesh and Myanmar RIS Research and Information System for Developing Countries Ministry of Development of Northeastern Region Northeastern Council. https://mdoner.gov.in/contentimages/files/RIS\_Border\_Trade\_Report\_final.pdf

corridor as compared to the land ports located in West Bengal. Export valuation from Assam to Bangladesh through Land Port Sutarkandi have fallen between 2021 and 2023. Export valuation dropped from INR 103 Crores in 2021-22 to INR 6 Crores in 2023-24 exhibiting a 94% decrease. Similarly, the value of exports from Tripura to Bangladesh via Land Ports Agartala and Srimantapur fell from INR 203 Crores in 2021-2022 to INR 10 Crore in 2023-2024.2 Table 6 provides a list of commodities with fall in export and import valuation ranging from 2019 to 2023.

LPAI guarantees the provision of all essential amenities at these land ports to ensure a smooth experience for all parties involved. Additionally, to improve and enhance trade and passenger facilitation, LPAI regularly assesses the establishment specifications at the port level. All passenger terminals are now equipped with various amenities, including waiting areas, secure environments, digital payment options. Key initiatives undertaken by LPAI include enhancing convenience for travelers by introducing digital

payment options and ATM facilities at designated points. Additionally, forex counters are being installed to streamline currency exchange. To strengthen security measures and ensure passenger safety, LPAI is also installing CCTVs and baggage scanners at all Land Ports for continuous surveillance and monitoring.

The kinds of goods that are imported and exported dictate the amenities that cargo terminals at land ports provide, such as cold storage, plant and animal quarantine, and bus parking areas. Most of the cargo services viz. Storage, Radio Detection Equipment, Baggage Scanner and Digital Payment Options exist in Land Port Agartala. However, services such as cold storage and plant and animal quarantine are scarce in Dawki and Land Port Sutarkandi. Srimantapur on the other hand lacks only radio detection equipment and animal quarantine. A variety of programs are included in LPAI's digital strategy with the goal of improving the effectiveness and efficiency of its land ports. One major project is the installation of high-speed internet throughout every one of its land ports.

Table 4. Major sectors in the Northeast 9

State	Industry		
	Agriculture and Food Processing		
	Bamboo Processing		
Assam	Mineral and Allied Products		
	Sericulture		
	Plastics and Petrochemicals		
Arunachal Pradesh	Agriculture, Horticulture and Food processing		
Attunaciai i facesii	Hydrocarbon and Mineral		
	Agriculture, Horticulture and Food processing		
Manipur	Handicraft and handloom		
	Agriculture and Horticulture		
Meghalaya	Textile		
	Mining and Minerals		
Research and Information System for Developing Countries Ministry of Development of Northeastern	9. Northeast Global Investors Summit 2023		
Region Northeastern Council <a href="https://mdoner.gov.in/contentimages/files/RIS">https://mdoner.gov.in/contentimages/files/RIS</a> Bor der_Trade_Report_final.pdf	https://www.hciwellington.gov.in/docs/1689053018new.pdf		

State	Industry
Mizoram	Bamboo and forestry
MIZOTATII	Handicraft and handloom
	Agro based industries
Nagaland	Apiculture
	Bamboo
0.11.	Agro Horti Food processing
Sikkim	Pharmaceuticals
Tripura	Rubber, Agarwood Bamboo
	Agro Horti Food processing

Table 5. Value of Trade through Land Ports from 2019 - 2023

value (INR Crores)

Land Ports	2019-20	2020-21	2021-22	2022-23	2023-24
Petrapole	11514.468	9470.513	18167.318	14530.133	15800.429
Ghojadanga	574.116	1701.832	3478.532	2005.318	1413.227
Hili	760.461	1300.598	2542.974	2680.078	2417.120
Fulbari	55.574	369.932	1244.409	903.033	241.230
Sutarkandi	244.888	-199.619	-280.835	-160.152	- 76.376
Agartala	302.724	-396.901	-249.327	-255.483	- 325.091
Srimantapur		-55.901	26.679	-149.201	- 101.983

Source: DGCI

Table 6. Products with Consistent Fall in Export & Import Valuation between NER and Bangladesh

S. No.	Fall in Export Valuation	S. No.	Fall in Import Valuation
1.	Edible fruit & nuts; peel of citrus fruit or melons	1.	Sugars and sugar confectionery
2.	Coffee, tea, mate & spices	2.	Preparations of cereals, flour, starch or milk; pastry
3.	Cereals	3.	Preparations of vegetables, fruits, nuts

S. No.	Fall in Export Valuation	S. No.	Fall in Import Valuation
4.	Fish and another aquatic invertebrate	4.	Beverages, spirits and vinegar
5.	Essential oils resinoids; cosmetic	5.	Salt; sulphur; earths & stone; plastering materials, limestone
6.	Miscellaneous manufactured articles	6.	Organic chemicals

S. No.	Fall in Export Valuation	S. No.	Fall in Import Valuation
7.	Edible vegetables and certain roots and tubers	7.	Inorganic chemicals
8.	Salt; sulphur; earths & stone; plastering materials, limestone	8.	Paper and paper board; articles of paper pulp
		9.	Cotton
		10.	Knitted or crocheted fabrics
		11.	Articles of Apparel and clothing accessories
		12.	Glass & Glassware
		13.	Cocoa and cocoa preparations

Source: DGCI

This important action is scheduled to fix the long-standing connection problems afflicted isolated areas, permitting a stronger infrastructure for communication. dependable Access to the internet is more than just a matter of convenience; it is an essential element of provision of services <sup>10</sup>. Infrastructural development is the sine-qua-non for boosting cross border trade. Hence, to facilitate trade, LPAI should build the following facilities to boost Indo-Bangladesh trade via the

#### **Export Valuation**

- Edible fruit & nuts; peel of citrus fruit or melons
- Coffee, tea, mate & spices
- Cereals
- Fish and other aquatic invertebrate
- Essential oils resinoids; cosmetic
- Miscellaneous manufactured articles
- Edible vegetables and certain roots and tubers
- Salt; sulphur; earths, stone; plastering materials, limestone

Northeastern corridor of India:

Weighbridge Facilities: Accurate weighing of goods is crucial for ensuring that trade transactions are based on correct valuations and for maintaining compliance with regulations.

Upgrading and increasing the number of weighbridges at land ports will help in minimizing delays, reducing discrepancies, and facilitating the quick clearance of goods.

Dumping Facilities: For bulk commodities like cement, limestone, and sulfur, having adequate dumping facilities is essential. These facilities should be equipped to handle large volumes, ensuring that goods are stored properly and are not exposed to environmental conditions that could degrade their quality. By expanding dumping facilities, LPAI can improve the efficiency of trade operations and reduce the risk of material loss or damage.

Laboratory Testing Facilities: Commodities such as organic and inorganic chemicals, food products (e.g., sugars, cereals, fruits, and vegetables), and materials like paper and textiles require stringent quality checks. Establishing state-of-the-art laboratory testing facilities at key land ports will enable faster and more accurate testing, ensuring that goods meet required standards before crossing borders. This will enhance the trust of trading partners and help prevent the rejection of

#### **Import Valuation**

- Sugars and sugar confectionery
- Preparations of cereals, flour, starch or milk; pastry
- Preparations of vegetables, fruits, nuts
- Beverages, spirits and vinegar
- Salt; sulphur; earths, stone; plastering materials, limestone
- Organic chemicals
- Inorganic chemicals
- Paper and paperboard; articles of paper pulp
- Cotton
- Knitted or crocheted fabrics
- Articles of apparel and clothing accessories
- Glass & glassware
- Cocoa and cocoa preparations

<sup>10</sup> Gateway to India: Innovating. Leading.Transforming. FY 2023 - 24 https://lpai.gov.in/sites/default/files/2024-08/6.pdf

consignments.

Cold Storage Facilities: For perishable commodities like fruits, vegetables, fish, and other food products, cold storage facilities are crucial. Developing and upgrading cold storage units at land ports will help in preserving the quality of these products during transit, thereby reducing spoilage, and enhancing their marketability.

Specialized Handling Equipment: The handling of fragile commodities like glassware and cocoa preparations requires specialized equipment to prevent damage during loading and unloading. Investing in advanced handling equipment at land ports can significantly reduce breakage and loss, improving the competitiveness of these goods in international markets.

Customs Clearance Automation: Streamlining the customs clearance process will reduce the time required for processing goods at land ports. This will be particularly beneficial for high-volume commodities like cereals, cotton, and chemicals, where delays can lead to significant financial losses.

Enhanced Connectivity and Warehousing: Improving Road and rail connectivity to land ports, along with expanding warehousing capacities, will facilitate the smooth movement of goods and ensure that they can be stored safely before being transported to their destination. This is especially important for bulky items like salt, sulfur, and limestone, which require large storage spaces.

It is essential to expedite the customs clearance processes to reduce delays thereby making trade more efficient. Installation of RFID scanner at the entry points is mandatory. To ensure smooth digitization of customs operations and introducing a single-window clearance system, it is essential to have smooth internet connectivity across all land ports. Deploying mobile network boosters in areas of the Land Port where network connectivity is weak/unavailable can resolve this problem.

Furthermore, to improve operational efficiency, LPAI is giving top priority to the installation of innovative measures including computerized entrance and exit systems and automated gates. The adoption of these technologies is in keeping with LPAI's ongoing efforts to expedite movement and shorten processing times. LPAI hopes to make traveler and freight operator experiences more efficient and trouble-free with these ideas.

Article by: Shri Vidyadhar Jha, Director (Ops), LPAI Co - Author: Ms. Swastika Mukherjee, Consultant,



### Land Port Agartala

## Catalysts for India's Economic Integration and Development

#### Introduction

India, with its vast land borders and diverse trade partners, stands at a crucial juncture in its economic evolution. As globalization reshapes trade dynamics, the importance of land ports as critical infrastructure cannot be overstated. The Land Ports Authority of India (LPAI) plays a pivotal role in managing these strategic gateways, enhancing India's connectivity, facilitating trade, and fostering regional cooperation. This article delves into the significance of land ports, the challenges they face, and the prospects that lie ahead.

# The Role of Land Port Agartala in India's Trade Landscape

Land Port Agartala is operational since Nov 2013 and serving as a crucial node in the transportation network, enabling the smooth flow of goods and across border movement of people. Tripura shares 856 km land border with Bangladesh from 3 sides. Each of these borders represents unique economic opportunities and challenges. But at the beginning challenges were yet to surface as gradually all stakeholders like Immigration, Customs, BSF were unable to coordinate. Local people were also protesting for easy access inside LPAI premises. Gradually after regular meetings, common SOPs and the LPAI mandate came into existence. Even the local businessmen were reluctant to continue under LPAI's supervision, which was sorted through various meetings.

Economic Significance: Land Port Agartala contributes significantly to India's economy by facilitating cross border trade in a variety of sectors; including agriculture, textiles, and construction material. The efficient handling of cargo by Agartala Land Port of its own leads to reduced costs for exporters and importers by decreasing the loading unloading time and returning of Bangladeshi trucks within same day, enhancing India's competitiveness in the global market.

Regional Connectivity: Enhanced connectivity through land ports strengthens bilateral and regional ties. For instance, the Agartala border is not only a critical trade and pass route with Bangladesh but also a symbol of friendship and cultural exchange.

# Infrastructure Development: The Backbone of Land Ports

The modern Infrastructure at land port improved trade efficiency as well as passenger movement. LPAI has been proactive in enhancing infrastructure at ports.

Integrated Check Posts (ICPs): One of the key initiatives has been establishment of Integrated Check Posts. These posts combine customs, immigration, and quarantine facilities in a single location, significantly reducing wait times and bureaucratic delays. With advanced technology, ICPs ensure that trade flows smoothly while adhering to regulatory requirements.

Technological Innovations: The adoption of technology has transformed operations at land ports. Real-time tracking systems, automated customs clearance, and digital payment solutions are just a few examples of how technology enhances efficiency. These innovations not only



expedite the movement of goods but also improve transparency and accountability in trade processes.

Logistics Hubs: Developing logistics hubs near land ports is another strategic focus. By creating dedicated areas for warehousing, transportation, and distribution, these hubs streamline the supply chain, making it easier for businesses to operate. The establishment of logistics parks will also contribute to job creation and economic development in surrounding area.

#### Challenges Faced by Land Ports

Despite the progress made, several challenges persist that hinder the full potential of land ports.

Infrastructure Bottlenecks: While significant improvements have been made, many land ports still face infrastructural deficiencies. Issues such as inadequate road connectivity, insufficient warehousing facilities, and outdated customs processes can create bottlenecks that slow down trade.

Cross-Border Coordination: Effective trade and Cross border relation requires seamless coordination between countries. For e.g. during festive seasons Land Port Agartala in coordination with Bureau of Immigration works beyond regular working hours to clear passengers. Differences in Customs procedures, regulatory frameworks, and trade agreements can complicate the movement of goods.



Strengthening diplomatic ties and fostering regional cooperation are crucial for addressing these challenges.

#### **Security Concerns:**

Given the strategic nature of land borders, security is a paramount concern during political unrest situation August 2024 we received Indian students after stipulated time and provided them with all facilities like food, medical support etc. The need to balance efficient trade with effective border security can be challenging. Implementing robust security measures without impeding the flow of goods is essential for maintaining trade integrity.

#### **Environmental Sustainability:**

As land ports expand, environmental considerations must be prioritized for e.g. 2024 August flood has brought much havoc in Land



Port Agartala. The impact of increased traffic and infrastructure development on local ecosystems must be mitigated through sustainable practices.

#### Road Specific Issue:

Due to road specific movement permit, Bangladeshi patients used to suffer as they were unable to use Agartala port for exit. After several meetings with MHA and Dhaka Bangladesh High Commission, it has been sorted by mentioning Agartala's name along with Haridaspur in visa stamping.

#### **Infertility Treatment:**

Patients undergoing IVF treatment travelled to various healthcare facilities in India through Agartala land port as it was the only operational port during lockdown.

#### Mothers' Care:

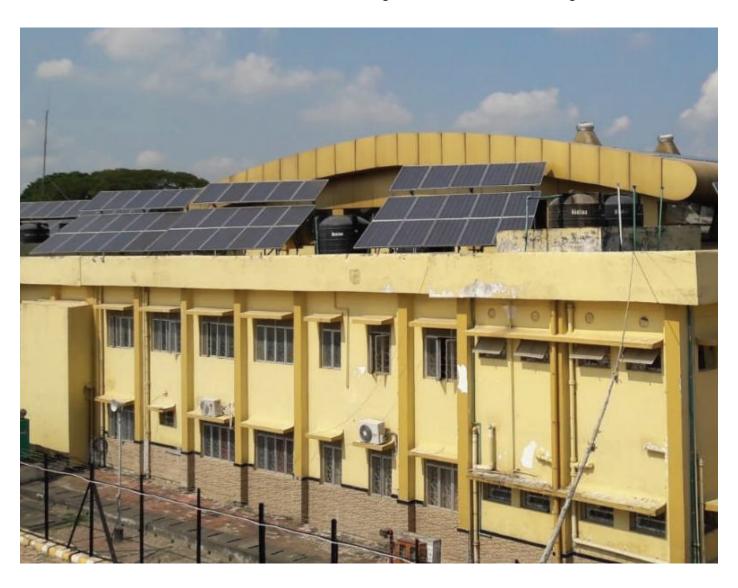
Mothers used to wait with food for their children along borders during retreat ceremony. In humanitarian ground after discussing with BSF Agartala land port allowed them to exchange food and meet in zero line after checking.

#### The Future of Land Ports in India

Looking ahead, the future of land ports in India is promising, with several initiatives aimed at enhancing their role as catalysts for economic growth:

#### Public-Private Partnerships (PPPs):

Engaging the private sector through PPPs can lead to more efficient management and development of land ports. By leveraging private investment and expertise, the LPAI





can expedite infrastructure improvements and service delivery.

#### Regional Trade Agreements:

Strengthening regional trade agreements can facilitate smoother trade flows across borders. Initiatives like the South Asian Free Trade Area (SAFTA) can enhance economic integration and open new markets for Indian businesses.

Sustainable Practices: The emphasis on sustainability will shape the future of land ports. Incorporating green technologies, promoting eco-friendly transport solutions, and ensuring responsible land use will be critical in minimizing the environmental impact of port operations.

Capacity Building: Training and capacity-building initiatives for customs officials, logistics providers, and traders can enhance the efficiency and effectiveness of operations at land ports. A skilled workforce is essential for adapting to evolving trade dynamics.

#### Digital Transformation:

The ongoing digital transformation in trade and logistics will continue to influence land port operations. Embracing digital platforms for documentation, customs clearance, and cargo tracking will streamline processes and improve efficiency.

Land ports are not merely transit points; they are vital instruments of economic growth, regional cooperation, and cultural exchange. The Land Ports Authority of India is at the forefront of enhancing these strategic gateways, ensuring that they evolve to meet the demands of a rapidly changing global landscape. By addressing current challenges, embracing technology, and prioritizing sustainability, India can harness the full potential of its land ports, positioning itself as a leader in regional trade and economic development.

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## Land Port Darranga

## A Visual Symphony of Darranga's Dawn: From BTC to ICP

The winding roads of Assam, leading towards the serene kingdom of Bhutan, have long been pathways of trade and cultural exchange. India, a steadfast partner, recognized the need to enhance this connection. Whispers of transforming Darranga (Assam) / Samdrup Jongkhar (Bhutan) crossing from a Border Trading Centre to full-fledged land port began a year before the grand ceremony held onNovember 7, 2024. The idea was a resultant from a high-level discussion at the Prime Ministerial level, with the heads of both the nations agreeing to the need for transformation. This dream, born from the desire to bolster trade, tourism, and connectivity, was about to become a reality.

#### The Strategic Stage: Crossroads Convergence Point

Nestled in the Tamalpur district of Assam, just 700 meters from the Bhutanese border, the Darranga



land port sprawls across 14.5 acres. Its strategic location, leveraging the improved connectivity of NH 27 near Rangia and the established customs infrastructure in Bhutan, promised a brighter future for cross-border interactions. However, a crucial step was needed: the formal handover of the facilities.



#### The Pen's Stroke: from Paper to Pavement

On July 15th, 2024, the Government of Assam, eager to streamline operations, requested the takeover of three Border Trade Centres (BTCs), including Darranga. A high-level committee was formed and the momentous day arrived on August 8th, 2024. The transfer, marking the culmination of a transformative journey was completed under the guidance of LPAI and State Government officials. Darranga, once a humble BTC, is now the first Land Port to be upgraded on the Bhutan border- a testament to the tireless efforts of the Land Ports Authority of India (LPAI) officials stationed at the Darranga Land Port, an impressive demonstration of collaboration between the Head Office and land ports, completed in just three months.

# The Ripples of Transformation - Echoes of Change

The transformation has been nothing short of remarkable. The once rudimentary crossing is now a modern facility, boasting a comprehensive office complex, spacious parking areas, and strategically placed loading and unloading zones. A state-of-the-art weighbridge ensures accurate

cargo measurement, while a capacious warehouse provides secure storage. Residential quarters offer comfortable accommodation for port officials. Before, the crossing was often chaotic, with limited facilities and cumbersome procedures. Now, dedicated inspection areas and advanced plant quarantine systems maintain the integrity of cross-border trade and biosecurity. Ample parking facilities manage the flow of traffic, ensuring efficient operations. The strategic management of the Bhutanese check posts at Samdrup-Jongkhar and Mottanga further streamline cross-border movement.

Beyond Trade: A Cultural Tapestry Woven Beyond its role as a vital trade hub, Darranga has





blossomed into a cultural centre. The vibrant markets of Samdrup-Jongkhar, showcasing the "Samjong" brand with its agricultural, livestock, and tourist products, exemplified the economic and cultural synergy between India and Bhutan.

A 30-meter flagpole, erected in October, stood as a symbol of this renewed partnership, drawing tourists eager to capture its grandeur.

# From Humble to Hub: The Quantum Leap of Improvement

The advantages of the upgrade were clear. The systematization of cargo processing, with designated parking spaces and a buffer area, transformed the once chaotic flow of goods. Refloored and cemented parking, along with well-constructed brick roads, ensured smooth movement within the port.































The new structure features a capacious bunker halls, accommodating 12 people each. The admin block was revamped, featuring a server room, control room, and a chamber for BGF officials. Refurbished toilets and a new VIP lounge provided added comfort.

# Safeguarding the Passage: A Network of Security

In the process of transformation, safety and security were paramount. Twenty-eight CCTV cameras have now been installed to monitor various corners of the landport, and repaired streetlights illuminate the grounds, fostering safety at night, besides easing movement. The DG set was repaired, and a separate inverter was installed at the new immigration counter, which featured separate arrival and departure counters for efficient passenger flow.

# Opening Doors: A New Route for Global Travelers

The Darranga land port has also opened a new gateway for third-country nationals to enter Bhutan via India, a privilege previously limited to Paro International Airport and the Jaigaon-Phuentsholing border. For years, third-country nationals faced hurdles entering India through Bhutan. Without proper

immigration facilities at Darranga, they had to take long detours to designated checkpoints, adding days to their journey.

Then came the transformation. With Darranga's upgrade to a land port, separate immigration facilities are finally in place. Travelers can now enter India seamlessly, with proper documentation and official processing. No more detours, no more confusion—just a smooth, legal entry. For many, the land port is more than infrastructure; it was the gateway to new opportunities.

# Charting the Course: The Future's Blueprint

Looking ahead, the port aims to expand its facilities to further boost trade. The increasing volume of 20-wheeled trucks necessitates a more robust weighbridge, and the ever-growing cargo volumes demand further parking expansion. Plans are also underway to develop a guest house and establish a sewage treatment plant, aligning with LPAI's commitment to sustainable practices.

The transformation of Darranga is more than just an infrastructural upgrade; it is a testament to the enduring friendship between India and Bhutan. It is a story of vision, dedication, and the



unwavering commitment to fostering stronger ties, ensuring a prosperous future for both nations. The once quiet crossing now stands as a vibrant symbol of cooperation, a gateway to a shared future.

#### A Ribbon Cut: Unveiling the New Dawn

The grand inauguration, held on November 7th, 2024, was a celebration of this strengthened bond. In the presence of His Excellency Lyonchhen Dasho Tshering Tobgay, the Prime Minister of Bhutan, and inaugurated by the Hon'ble Governor of Assam, Lakshman Prasad Acharya, the Darranga land port officially opened its gates.

#### Way Forward

Making use of the new land port, India seeks to foster its ties with Bhutan. This will not only promote tourism in both the countries but will also enhance cultural exchanges and provide a boost to trade, benefitting the economy of both the nations.

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Co - Author By: Ms. Sanjwala Mukund & Ms. Vihag Guru, SSU - LPAI





# Advancing Sustainable Cross Border Trade

#### The Role of Land Ports

# Importance of Sustainability and India's Commitment

The global urgency for climate action has escalated in this "critical decade," with the need to reduce global carbon dioxide emissions by 45% to achieve net-zero by mid-century. As a rapidly growing economy and a significant player in global trade, India has expressed its

ensuring that land ports not only reduce their own carbon footprint but also influence sustainability across cross-border trade and value chains.

Land ports serve as gateways for cross-border trade and strategically positioned to impact sustainability on a larger scale. They not only facilitate the movement of goods but can influence the sustainability practices of the industries and logistics chains they serve. By acting as a hub for greener trade, LPAI can

#### Panchamrit Vision 50% of its Reduction of Reduction of Achieving the Increasing non-fossil fuel energy total the carbon target of netrequirements projected intensity of capacity by zero to come from carbon the economy emissions by 500GW by by 45% by renewable emissions by 2070 2030 energy by one billion 2030 2030 (compared to tonnes by 2030 2005 levels)

commitment to intensify climate action.

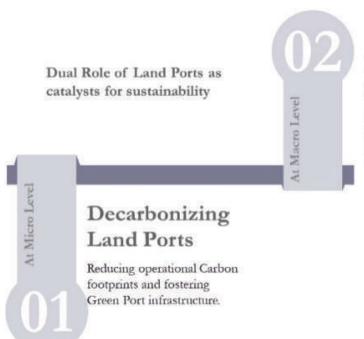
During COP26, India presented the
"Panchamrit" (five nectar elements) of its
climate action and has committed Reduction of
the carbon intensity of the economy by 45% by
2030 (compared to 2005 levels).

India's commitment to fight climate change calls for strategic integration of sustainability across sectors, including trade, transport, and logistics. LPAI can play a pivotal role in promote and support country-level sustainability targets.

This article explores the impact of trade on the environment and how land ports can take on a larger role in promoting sustainability in cross-border trade.

#### Effect of Trade on Sustainability

Globalization and the fragmentaton of production processes have contributed to



## Driving Sustainable Trade

Influencing cross-border value chains and leveraging Port's position to promote sustainability in cross-border trade.

rising emissions due to increased transportation and the disposal of goods across complex global value chains. More than 75% of the emissions embedded in international trade come from a few key sectors, including energy and transport.

As trade volumes increase, the associated carbon footprint grows unless mitigated by regulatory incentives, innovation, and investment in greener technologies.

#### Sustainability avenues in cross-border trade

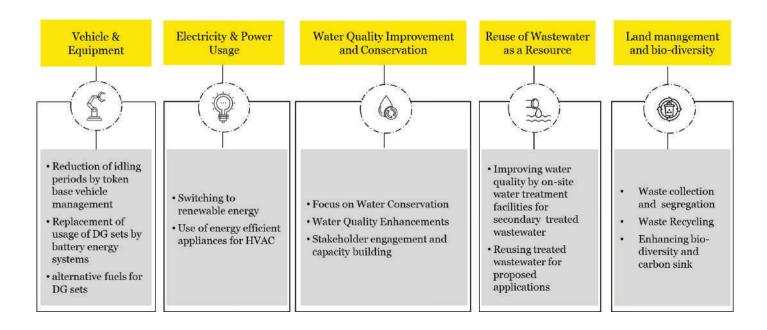
One of the most impactful ways to promote sustainability in cross-border trade is by incentivizing greener modes of cargo transport. This approach can encourage stakeholders, particularly global trading companies, to adopt cleaner technologies. Electric truck models produce at least 63% lower emissions compared to traditional diesel trucks.

LPAI can implement both fiscal and non-fiscal incentives to promote sustainable cross-border trade. Reduced tariffs and faster customs clearance for cargo transported via electric or

hybrid trucks, or vehicles using greener fuels like CNG and biodiesel, would save companies both time and money. Currently, Government of India is also taking initiatives to boost adoption of EVs across the country and has allocated Rs 500 crores for incentivizing adoption of E-Trucks as a part of PM E-Drive scheme by ministry of heavy industries. Policy efforts by LPAI in this direction will further promote decarbonisation in cargo transport in trade across industries.

Further, providing charging stations and maintenance hubs for electric cargo trucks at ICPs will ease the transition to EVs for long-haul transport. Central subsidies available including under PM E-Drive, a scheme for promotion of electric mobility in the country, and state-level subsidies can be leveraged for installing the required charging infrastructure based on demand analysis. Available reductions in energy charges or demand charge exemptions will further reduce the cost of electricity supplied to charging stations.

Additionally, value-added services such as



storage (including cold storage), weighment, parking, and transshipment can be offered at discounted rates to green cargo operators. Special recognition could be given to trading companies adopting green trade practices through website listings, priority access to services, and sustainability certifications, enhancing their brand reputation and encouraging further adoption of eco-friendly cargo transport methods.

Advanced tracking systems are being explored to optimize logistics routes and reduce fuel consumption and time spent in transit. Smart routing ensures that cargo moves through the most energy-efficient paths, avoiding congestion and minimizing idling times.

LPAI may plan to foster cross border collaborations and promote the development of regional agreements focused on green trade practices. Avenues like establishing standardized emission limits for goods transported across borders and, developing specific routes, known as green corridors, for low-emission freight transport can be explored.

LPAI can act as an aggregator by facilitating the high-end utilization of residual flows from one company in another, where materials are reused or recycled. Leveraging its position as a trade and logistics hub, LPAI may plan to setup a dedicated recycling hub, enabling companies to jointly develop and implement innovative recycling practices, creating a circular economy within cross-border trade, reducing waste, and optimizing resource use across industries.

By positioning land ports as hubs for sustainability, LPAI not only supports country level goals for climate action but also drives greener practices in cross-border trade. This dual approach strengthens India's commitment to achieving its climate goals while fostering a more sustainable global value chain.

Article by: Shri Madhukar Pandey, Deputy Secretary (Admin/ Finance), LPAI Co – author: Ms. Palak Bansal & Mr. Ashwin Prabhu, SSU - LPAI

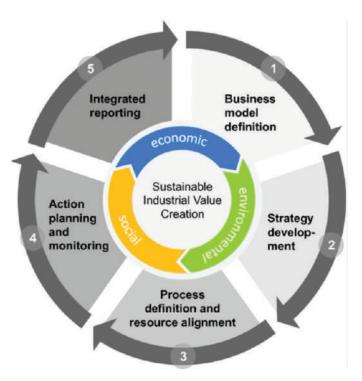
#### Green Audit of Land Ports in India

# The Evolution and Components of Green Auditing

Green Audits refer to the practice by which companies carry out an assessment of their business processes to determine how sustainable their operations are. There may be internal audits carried out by members of the company itself to check the consistency of their practices with their environmental management systems (EMS) module. However, when we talk about green audits, we normally refer to audits carried out by external agencies.

In India, CDG (Centre for Digital Governance) uses ISO 17020 accreditation for carrying out green audits as per National Assessment Accreditation Council (NAAC) requirements. An ISO 17020 certification is a standard that specifies an inspection body's competence and reliability in carrying out audits. A green audit ensures efficient utilization of a company's resources in a sustainable manner.

Companies prepare a report of their sustainable activities, broadly communicating their Environmental, Social and Governance (ESG) goals; basis which they are rated. Though the concept of ESG has been there for a long time, it was coined as a term only in 2005 by the United Nations Environment Programme (UNEP). While preparing these reports, organizations must adhere to standards such as Global Reporting Initiative (GRI), developed by the United States-based non-profits Ceres (formerly the Coalition for Environmentally Responsible Economies) and consulting agency Tellus Institute; Sustainability Accounting Standards Board (SASB) curated by Dr. Jean Rogers, Business Responsibility and Sustainability Reporting Format (BRSR) generated by the Securities Exchange Board of India (SEBI), Task Force on Climate-related Financial Disclosures (TCFD) created by the Financial Stability Board (FSB) and Carbon Disclosure Project (CDP) established by the UK Government's Department for International Development via



Meaningful Sustainability Reporting – Choosing and Using Reporting Guidelines: Part Two, BBJ Group

the Global Canopy Programme and the JMG Foundation. They have resulted in an increase in the voluntary disclosure of environmental data by companies, such as their carbon footprint, in recent years. The LPAI has sought to make use of GRI standards in its disclosures.

In addition to ensuring that companies adhere to these carbon-disclosure standards, countries have the responsibility of curbing non-ecofriendly imports. Mechanisms like the European Commission's Carbon Border Adjustment Mechanism (CBAM) help in maintaining such national standards. Though it is in a transitional form as of now, it is expected to become a full-fledged mechanism by 2026. It would begin with regulating goods with higher chances of carbon leakage, such as iron and cement; and later become more inclusive in its regulatory purview.

India also has regulatory mechanisms in place to prevent import and usage of hazardous materials. The Green Rating for Integrated Habitat Assessment (GRIHA) framework serves a similar purpose as CBAM, it differs only in that it certifies entire projects. Any construction above 2500 square meter is eligible to apply for a GRIHA certification which promotes healthy construction management practices, green infrastructures and low impact designs. This certification has been adopted by LPAI to regulate its construction and engineering teams. The Indian Green Building Council (IGBC) also works on promoting green buildings, by setting nationally acceptable benchmarks.

# Carrying out Green Audits in the Land Port landscape

With the emergence of Integrated Check Posts (ICPs), the transportation of passengers and freight across borders has become easier and is thus increasing, accompanied by a rise in economic benefits. The expansion in the volume of trade and the number of tourists and pilgrims entail increased emissions. Offsetting these emissions is the need of the hour, to ensure sustainability of the ports.

LPAI is committed to offsetting these emissions. Though we see an uptick in the number of land ports, the sustainable efforts to curb these emissions are rapidly catching up; with detailed baselining of various kinds of emissions being carried out. Such criteria for existing land ports include study of waste-segregation, treatment of wastewater, disposal of solid wastes etc., and serve as the bases for assessing emerging land ports.

In these land ports, some of the freight corridors have even functioned as passenger routes, in the event of closure of conventional passenger routes, as has been seen in the Jogbani land port with Nepal. The challenge of curbing emissions and ensuring sustainability of ports is exacerbated by the evolution of land ports as multimodal means of exchange. Increased dependence of some neighbours on Indian ports for their trade, due to India's international commitments and obligations is also a key concern for rising emissions.

Waste management techniques: Land ports are sites for generation of food waste, paper waste as well as e-waste. These are mitigated by employing specific techniques for curbing specific kinds of waste. These measures are widely being employed by land ports. In addition to traditional waste management practices, some innovative practices are also being considered.

For instance, recyclable wastes such as paper and cardboard can be managed through the installation of small paper-recycling facilities in collaboration with other ministries and departments of the government, which can generate employment in addition to helping land ports become increasingly climate neutral. This can be achieved by encouraging locals to make paper crafts such as bags, photo frames and folders from recycled material; or participate in the shredding process. The idea should be to keep manual involvement at around 40% and machine involvement at 60%, which would not only balance the efficiency of machines with the intricacy of human labour but will also help minimize the costs of procuring expensive equipment for the project. Such an initiative would also further employment generation, alongside reducing the life cycle energy use of paper. These goods made from recycled paper can be sold at the border haats and elsewhere.

E-wastes are managed by contacting the nearest e-waste recycler present near each port, under the aegis of the National E-Waste Recycling Programme. Separation of e-wastes should be made obligatory at the disposal stage for this purpose, by ensuring separate black bins for e-waste collection, in addition to blue bins and green bins for separating recyclable and biodegradable wastes. Waste segregation is the vital first step for the success of any waste management initiative, which is increasingly being adopted by land ports in India. The partial success of waste-to-energy plants in India sheds some light on the importance of segregation. Unsegregated wastes sent to these plants had high moisture content and inert material which has low calorific value or sometimes, could not even be burnt.

#### Power-generation in land ports:

Land ports in India have been making use of renewables, with their capacity increasing rapidly with each passing year. This has successfully helped to reduce emissions as well as costs. For instance, a 1300 Kw solar power plant was commissioned at Attari land port in the year 2022, which has resulted in nearly 50% reduction in electricity cost till date. Similarly, a 100 Kw power plant has been established at the Agartala land port.

The energy generated is used in street lighting. By enhancing its solar capacity and making more efficient use of the existing capacity, the land ports can become increasingly reliant on solar power and start using it for powering the cold storge facilities, electricity in offices and canteens, as well as for cooking.

At present, in an initiative to minimize energy usage and attenuate fire risks, land ports make use of induction cooktops in lieu of gas-burners at the passenger terminals. It seems to be the best choice for the planet: though it necessitates the use of specialized cookware, it uses 90% less energy as compared to conventional gas stoves.

Passenger-flow in land ports: In addition to the flow of cargo, there are land ports in India which facilitate the flow of passengers, such as the Kartarpur-Sahib corridor to Pakistan. This poses the risk of increased emissions, which can be tackled by charging a small fee at the ports which would be like an environmental cess and could go towards offsetting carbon emissions through efficient green port designs and other pro-environmental projects. Implementation of digital solutions at ports, like fast-tag technologies and e-scanning of passports and auto-deduction of fee for green projects will also save time in addition to curbing emissions.

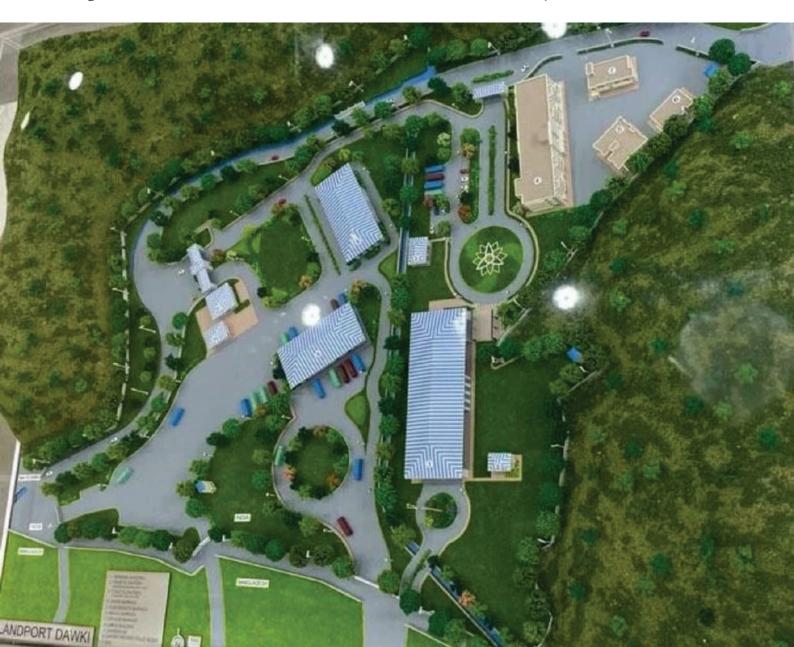


Reducing Congestion in Land Ports: To offset emissions by the transport of goods, land ports have taken many steps forward, mainly centered aroundcurbing congestion. This is vital in land ports as their biggest source of scope-3 emissions is equipment utilization and truck movements. Land ports in India have achieved this by reducing the transit speed of vehicles through various initiatives like zero-point discussions (to address concerns on either side of the border), building new entry/exit gates (as done at ICP Petrapole to accommodate larger traffic), installing large vehicle-size scanning machines (to reduce time taken by custom officials), etc. The 'Yatri Subidha portal' initiated at the Petrapole land port ensures a seamless clearance process by allowing international passengers to reserve

specific time slots.

In another initiative to reduce congestion, a second gate, the Maitri Dwar, has also been inaugurated at this land port. A remarkable reduction in congestion has been achieved by the Raxaul land port- it has brought down the wait time of trucks from 4 days to 1.5 days for both imports and exports. The construction of new passenger terminal buildings has also helped in reducing congestion. Dust and suspended particulate matter produced from the concentration of vehicles near the borders is also a challenge which has arisen out of increased inflow of cargo. This is attenuated by covering hauling trucks containing construction materials with tarpaulin. Additionally, requiring these vehicles to run at pre-determined speeds would also help minimize dust generation. Raising awareness amongst truck drivers about the harmful effects of high idling times by installing posters and through verbal encouragement can help curb emissions by manyfold. LPAI has also employed the use of Geographic Information Systems (GIS) to map the green cover and henceforth work on its enhancement. These initiatives within the project location have also helped minimize the impact of dust. A long-term plan being explored by LPAI in this direction is replacing diesel trucks with EVs, accompanied by well-developed EV infrastructure such as EV charging stations with fast-charging capability in land ports.

Promotion of sustainable lifestyles at Land ports: Land ports have often been sites of eco-friendly activities. To celebrate Azadi ka Amrit Mohotsav, a cycle rally was organized at the Jogbani land port. Similarly, the Raxaul land port has maintained a garden as big as 10 acres around it. Key environmental issues, such





Stockholm Central Station: A Case Study of a Green Railway Station

as Wildlife Trafficking, are discussed through sensitization seminars at land ports, such as the one organised by the Wildlife Crime Control Bureau at the Agartala land port. Activities like tree-plantation are also frequently conducted at land ports. Increasing the green cover helps develop a natural barrier from noise as well as air pollutants. It also has ecological benefits such as enhancement of soil health. LPAI is committed to the government's goal of maintaining a green cover in at least 33% of the land area. Given the challenge of space for expanding this cover, the Miyawaki technique has been employed to create small green belts wherever possible. This technique involves plantation of indigenous tree species in small pockets around an urban landscape. This technique can help ports achieve the target green cover, in addition to preserving indigenous species.

While India is making rapid success towards success of green ports with its robust sustainability plan, it can adopt some innovative measures adopted by ports and railway stations the world over. For instance, one of the world's

most eco-friendly railway stations is Stockholm Central Station in Sweden. This station, one of the largest in Scandinavia, incorporates innovative sustainability initiatives, primarily through energy efficiency. One of its key features is a unique heating system that harnesses body heat from the thousands of passengers who pass through the station daily. The excess body heat is collected and converted into energy, which is then used to heat a nearby office building, Kungsbrohuset, reducing the need for traditional heating methods. Stockholm Central also promotes the use of renewable energy, sourcing much of its electricity from wind and solar power, with approximately 69% of Sweden's energy needs being fulfilled using renewables. Just like some of the land ports in India, the station has implemented energy-saving measures like LED lighting and energy-efficient escalators, which adjust speed based on passenger flow.

Moreover, the station encourages sustainable transport modes, in line with LPAI's upcoming EV policies, integrating well with the city's public transit network and offering extensive

bicycle parking to reduce reliance on cars.

By combining energy efficiency, renewable energy use, and sustainable transport integration, Stockholm Central Station stands out as an exemplary model of how transportation hubs can reduce their environmental impact while maintaining high functionality. This station demonstrates that green infrastructure can thrive even in highly urbanized settings.

### The way forward

Though the existing land ports have been working on several green solutions, there are a few innovative solutions to be explored for newer land ports which are still under development. The concepts of Green Building can be brought in for spaces like the immigration centres and cafeterias. This can employ facilities like internal sewage systems, dynamic designs which ensure indoor lighting, rainwater harvesting and energy saving using efficient motors. Though the retrofitting of some of these systems might be a challenge for existing land ports, an inculcation of these

systems would help foster sustainability in future land ports. Other environmental impact mitigation measures for future land ports could include good construction practices and regular sprinkling of water at the exposed areas. Simple measures such as composting of the wet wastes separated out through segregation and establishing a proper mechanism for rainwater harvesting can also help enhance the green cover and help the land port achieve its carbon-sequestration goals.

With that said, implementation of some of these measures remains a challenge due to the already increasing operational expenditures. The green measures should be implemented in such a manner that there is a positive Economic Internal Rate of Return (EIRR).

Successful implementation of these measures would put India on a good stead in terms of its commitment to the UNFCCC and the Paris Agreement by helping it take steps in achievement of net-zero by the year 2070.

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# Sustainable Initiatives at the Attari Land Port

Located 28km from the city of Amritsar, the Attari land port is the first land port which was developed after the enactment of the Land Ports Authority of India (LPAI) Act, 2010. The Attari Integrated Check Post (ICP), located on the India-Pakistan border in Punjab, incorporates several sustainable features aimed at enhancing environmental performance and reducing its ecological footprint.

While studying the features of the land port, it is important to note the geographical region and its ecology. The Attari land port project is not particularly located in an ecologically sensitive area, though the area faces the problem of dust and pollution.

# **Energy Efficiency and Renewable Energy**

The Integrated Check Post (ICP) at Attari incorporates solar energy through the installation of solar panels. A 1300Kw power Wastes from perishable imports- a challenge

Attari Land Port plant has been installed at the Attari land port. Solar panels have been installed in the cargo terminal and jatha shed. These panels are instrumental in lighting up the streets, as they are employed in streetlights which function on hybrid power. Thus, these panels reduce the port's reliance on conventional fossil fuel-based energy sources. Moreover, the establishment of these panels has resulted in approximately 50% reduction in electricity cost. Seeing the success of the solar initiatives, it can be reckoned that the port will benefit from employing these initiatives to other activities and can help balance high establishment costs with low operational costs. The port has already made great progress in renewables adoption, with approximately 60% of the energy consumed at the port being produced through solar power. As observed above, the adoption of renewables has resulted in a largescale reduction of costs, subject to economies of scale limitations as well as sunk costs of existing infrastructure driven by fossil fuels.



Apart from the use of renewable energy, the facility employs the use of energy-efficient LED lighting throughout the premises, which significantly cuts down energy consumption compared to conventional lighting systems. These comprise a 30W street fitting as well as a 400W floodlight.

## Waste Management and Recycling

The land port establishment projects typically involve infrastructure development works and building construction to improve existing border crossing point facilities. During the construction phase of such projects; dust, noise, construction wastes are inevitable, while there is always a risk of accidental spillage of



Wastes from perishable imports - a challenge

machine oil and lubricants. There's also a challenge of wastewater disposal on the construction site, pollution of surface waters and soil.

Additionally, land ports must deal with kitchen wastes, solid wastes and sewage produced through human use; as well as wastes produced by hauling trucks.

The port is taking strides in the direction of waste-reduction. It has adopted several measures such as waste segregation into wet and dry wastes. The allotment of a road-cleaning truck has also been allocated



high priority at the Attari land port.

It has also been found that there is surplus storage space at the Attari land port. This space is effectively utilised by constant commissioning and decommissioning of the area for various purposes, depending upon the dynamics of trade. The efficiency of space utilisation can perhaps be enhanced by delimiting some of the space for waste segregation and further sustainability even more by making compost out of segregated biodegradable wastes.

#### Green Cover and Green Practices

Golf cart plying at ICP AttariThe Attari land port has sufficient green cover, with around 800 trees surrounding the land port; more than half of which are local tree species. Additionally, the port hosts gardens of around 200 potted plants. Some of the empty spaces at the port can also be explored for agricultural and horticultural purposes, growing spices and medicines. Some green days are also observed at the Attari border, such as the World Environment Day.

# Challenges

It has been found that the trucks at the Attari land port have a high idling time as well as a high unloading time. While the unloading time is approximately 90 minutes, the idling time (leaving the engine on at lo RPM for purposes like electronics, heating and air conditioning) is 25 minutes.

Moreover, the high human footfall of 20,000 people every day, who come to witness the retreat ceremony, entails higher wastes generated at the passenger terminal. Wastes such as baskets from perishable imports form a unique challenge for land ports. Guidelines in the form of signposts can help remind truck drivers to reduce idling time, which not only reduces pollution but also helps in saving fuel costs. Further, to reduce the carbon footprint of passengers, innovative measures like electric vehicles can prove useful. Golf carts operational at the Attari land port resonate well with this solution. It would also be better if hand-woven and wooden baskets be used for imports, in lieu of plastic ones.

By overcoming roadblocks, the land port being the first one to be set up and the first one to adopt solar energy, can set an example for other existing land ports and the ones to come. The success of solar power at Attari has sparked LPAI's inspiration to extrapolate the solar model to other land ports. Feasibility of transitioning to solar energy at Petrapole and Raxaul has been recognised, leveraging available land and daily insolation.

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# Pivotal moments and LPAI engagements highlights

April'24 to March '25











- 1. LPAI collaborated with IIM Indore to support LPAI in training and international partnership
- 2. Dawki 1st Foundation Day
- 3. Gender Sensitization & Mainstreaming workshop at Land Port Attari.
- 4. Joint Operationalization of Rupaidiha and Nepalganj Land Ports
- 5th Indo-Bangla Coordination Committee Meeting at Land Ports Agartala & Akhaura















- Masterclass Lecture Series VI, delivered by Shri Jayant Singh, erstwhile Advisor NITI Aayog (currently Chairman, LPAI)
- Maternal and Health Awareness Camp at Sutarkandi Land Port
- 3. Collaboration with IIM Shillong

- 4. Enhancing Awareness and Action: ICC Members Annual Training
- 5. Fire Safety Training to LPAI Stakeholders
- 6. Training on smart Finance







- 1. ITEC Training Program
- Port level Indo –
   Bangladesh meeting
   Land Port Dawki
- 3. Inauguration of Darranga Land Port
- 4. 6th Meeting of
  Bangladesh -India sub –
  group on Infrastructure
  of ICP/LCSs
- Conference on Trade & Connectivity through land Port Sabroom















- 1. Soft Launch of Land Port Management System (LPMS) at Land Port Agartala
- 2. Pilot testing of the LPMS at Land Port Agartala
- 3. Workshop on Anti Human Trafficking at Land Port Rupaidiha
- 4. Gender Mainstreaming workshop at LPAI HQ
- 5. Celebration of 13th Foundation Day at LPAI HQ





- 1. MasterClass Lecture Series VIII
- 2. 3-day Residential Training at land port Agartala
- 3. Training for BIMSTEC countries at Land Port Agartala



# GATEWAY TO INDIA

Safe - Synchoronised - Sustainable