A review of corporate social responsibility policies among airline companies in India and abroad

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Abstract
The concept of corporate social responsibility in the Indian aviation sector has gained importance especially in last decade with increasing number of players, increasing air traffic and increased frequency of flights. With the rise in passenger traffic and frequency of flights in India, it is quite obvious the aviation sector have started putting an immense strain on the environment in terms air, noise, waste, water pollution etc. In the same context, the study tries to understand the current status of CSR in the Indian Aviation sector. Through the study of annual reports and other relevant documents of different aviation companies, it tries to evaluate how different aviation companies are involved in CSR in India.

One of the major findings of the paper is that the awareness of CSR reporting among airlines has increased especially during the five years last decade however considerable scope of improvement is there when compared with international counterparts. Further, other than environmental and social dimensions more focus is required on waste management, recycling through innovation and other neglected dimensions of CSR. Further, publishing of separate environmental reports in a common format can be adopted to improve CSR reporting in India. Furthermore, the companies should also focus on impact assessment of the CSR initiatives so that CSR resources are efficiently utilized.

Keywords: Aviation, corporate social responsibility, India, CSR annual reports

Introduction
It has now been well established that the Indian aviation sector is growing at a rapid pace. Further, recent policy intervention by the government of India including Liberalisation of Air Services, Route Dispersal Guidelines, Regional Connectivity Scheme, National Civil Aviation Policy (2016), changes in FDI policy etc. have given a further boost to the Indian aviation sector.

India’s domestic air traffic nearly doubled to 117 million passengers in 2017 with 100 flights taking off every hour compared with 67 in 2011, data released by aviation regulator Directorate General of Civil Aviation (DGCA)\(^1\). India’s airlines flew 117.18 million passengers in 2017 compared with 59.87 million in 2011. They also registered an 18% growth over the 99.88 million passengers who flew in 2016. Further, India has close to 500 planes in service and about 800 planes on order and is set to become the third largest aviation market by 2025, overtaking the UK, the International Air Transport Association (IATA) said in a report in October.

With the increase in the number of people travelling by air and frequency in flights in India, it is quite obvious the aviation sector have started putting immense strain on the environment in terms of air, noise pollution, waste production and biodiversity etc. The negative impact has led the emergence of CSR agenda in the air transportation industry.

In such a scenario, the challenge for Indian aviation operators is to develop a deeper understanding of the concept of CSR and adopt a proactive approach to address the challenge. In the same context, the study tries to understand the dynamics of CSR in the India with special reference of Aviation sector. Through the in-depth analysis of annual reports and other relevant documents of aviation companies, it tries to see how different companies operating in India are involved in CSR. It further studies the CSR policies of selected aviation companies across the globe.

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\(^1\)https://www.livemint.com/Companies/RHi9FvENDxO1re0jQ6bN3L/Indias-air-traffic-doubles-to-117-million-passengers-in-6-y.html
This paper contributes to CSR research for the Indian aviation sector, which is fastest growing aviation sector of the world. The study tries to provide insights about the various CSR activities prevalent among the aviation sector in India with the aim to broaden the understanding of CSR in Indian context where limited research into CSR in aviation sector is available.

The remainder of the paper is organized as follows. Section 2 presents a brief review of existing laws which govern CSR in aviation sector in India. Section 3 describes the data sources and the methodology adopted for estimation purposes. Section 4 presents the results. Finally, Section 5 provides a summary and concludes.

Section 2: Indian Scenario
Aviation industry is one of the fastest growing industries in India with a growth of 20 percent in overall departures. With regard to the domestic passenger traffic, the Economic Survey 2017-18 stated that India is the third largest civil aviation industry in the world, witnessing a growth of 23.5 per cent in domestic passenger traffic in 2016-17. The International Air Transport Association (IATA) expects India to be the largest aviation industry by 2030. The overall passenger traffic, domestic and international, have risen from 5.9 crore in 2006-07 to 15.9 crore in 2016-17, 65 percent of which is by the domestic passengers. The Directorate General of Civil Aviation reported that passengers carried by domestic airlines have risen from 9.5 million to 11.4 million passengers during January 2018, growing at 19.69 percent.

The demand for airlines in terms of revenue passengers kilometres (RPK) rose by a whopping 136 percent from FY2008 to FY2017 and the Capacity of domestic airlines in available seat kilometres grew by 93 percent over the same period. A MoCA report on Path Breaking and Inclusive growth in aviation released in May 2017 shows that India has witnessed a rise in number of scheduled and non-scheduled aircrafts by around 25.6 percent and 12.5 percent respectively in the last four years.

The freight traffic carried by scheduled airlines both domestic and international has been on a rising trajectory for a decade. The domestic cargo traffic rose from 368 thousand MT in 2007-08 to 638 thousand MT in 2017-18, growing at a CAGR of 6.30 percent. Complementary to this is the rise in the international cargo traffic form 1025 thousand MT to 1513 thousand MT, registering a CAGR of 4.42 percent during the same period.

Understanding the Growth of Aviation Sector
The double digit growth in the past can be attributed to several factors including the strong economic growth, rising standard of living, entry of low cost airlines etc. The section discusses the reasons for high growth in the aviation sector.

1. Strong Economic Growth and Rising Disposable Income: Growing civil aviation sector impacts other sectors through global trade and tourism and thus leading to the growth of the economy. A study by ICAO states that more than 4.5 percent of GDP is attributed to the air transport. The general economic theory explains that the rising economic growth has positive impacts on individual’s disposable income and eventually on living standards. People with higher income spend more on leisure travels and also on the imported products, which is made possible through the development in aviation sector.

2. Entry of low cost carriers: The aviation industry in India today has been flooded with a lot of low cost airlines that provide lesser comforts at low fares as compared to traditional airlines. The mammoth growth of the sector is, in addition, attributed to the tremendous and rising market share of these low cost airlines in the industry. The customer is benefitted by more competition, rise in the number of routes, the frequency of the trips and the seat capacity.

3. Surging tourist movement: There can be said to have a causal relationship between the growth in aviation sector and the tourism industry. On the one hand, the tourism industry is heavily dependent on air transport for visitors, businesses while on the other, it creates opportunities for air businesses to grow. The economic survey 2016-17 states that the number of departures of Indian nationals from India grew by 7.3 per cent to 21.9 million during 2016, from 20.4 million in 2015 and the domestic tourist visits grew by 12-7 in 2015-16.

4. Cutting edge information technology (IT) interventions: Ranging from low fare e-ticketing to expedition in boarding process through company websites, the all new developments in virtual infrastructure and its successful implementation has enabled the industry in attracting more customers. The use of IT has helped the airlines in reducing labor costs and thus improving their profit margins.

5. Focus on regional connectivity: The recent attention paid to connect various regions through aviation industry can drive their economic growth especially in the north eastern region. The Look East Policy of the government also focuses on utilizing the untapped potential of north east by improving the infrastructure in the region. In order to have a balanced regional growth, the airfare is capped at Rs. 2500 for one hour flight, making air travel affordable to all.

Recent developments in aviation sector in India
Considering the untapped potential of the industry, the government of India has recently taken various steps to boost and synchronize the growth of various aviation sub-sectors, i.e Airlines, Airports, Cargo, Maintenance Repairs and Overhaul services (MRO), General Aviation, Aerospace Manufacturing, Skill Development, etc; leading to have a multiplier effect on the economy as a whole.

1. FDI Policy
Under the Make in India initiative of 2014, the Government of India eased the Foreign Direct investment norms. It allowed 100% FDI under automatic route for Greenfield 3#BEFReport Aviation
3 UDAN- 3 years of Path Breaking and Inclusive growth in aviation, May 2017 Ministry of Civil Aviation.
4 Handbook on Civil Aviation Statistics 2016-17, Directorate General of Civil Aviation
5 Strategic Plan, Ministry of Civil Aviation 2010-15.
Projects and Existing Projects. In addition, the government has permitted 49 percent of the paid-up capital FDI through automatic route in scheduled airlines and regional air transport services. However, government approval is mandated beyond 49 percent. Having considered the case for scheduled airlines, it is imperative to look at the FDI norms for other services provided by the aviation industry. The government has permitted 100% FDI via the automatic route for non-scheduled air transport services, helicopter services/sea plane services requiring DGCA approval, MRO, flying training and technical training institutions, ground handling services subject to security clearance and sectoral regulations. All the relaxations or provisions were not applicable to the Air India. Recently, the Union Cabinet decided to discontinue with this restriction and allow foreign airlines to invest up to 49 percent under government approval route in Air India.6

2. National Civil Aviation Policy (2016)
NACP was created with a vision to provide safe, secure and affordable flying eco-system to the masses. It offers an optimistic view of enabling 50 crore domestic and 20 international ticketing by 2027. The policy is comprehensive in nature, covering 22 sectors of the civil aviation industry with multiple objectives. It aims to ensure safety, security and sustainability of aviation sector through the use of technology and effective monitoring, creating balanced regional growth by providing fiscal support and developing infrastructure. The policy works towards promoting the ease of doing business initiative of the government in the aviation sector by simplifying various procedures, such as introduction of e-governance. As per a report by MoCA on UDAN, May 2017, the following has been done recently under the policy
- Under the Policy, Open Skies Air Services Agreement was offered to 49 countries and 5 SAARC nations.
- No requirement of prior government approval for Indian Scheduled carriers to enter into codeshare agreement with foreign carriers.
- Validity of NOC increased to 36 months.

3. Regional Connectivity Scheme (RCS)- UDAN
The scheme is a part of the NCAP and came into effect in the second quarter of 2016-17. Through the scheme, the Ministry of Civil Aviation aims to introduce the airfare to Rs. 2500 per passenger, indexed to inflation, for a one hour flight. It had been decided that subsidies would be provided to the airlines to offer the said price and Airport Authority will be levied for upto 10 years for cargo operations under RCS.

4. Route dispersal guidelines
The DGCA introduced the guidelines in 1994 and divided the routes under three categories:
- Category-I: mostly between metro-cities. These are 12 in number.
- Category-II: routes connecting NER, J&K, Andaman & Nicobar Islands and Lakshadweep
- Category-III: All other routes.

The guidelines were issued with an aim to provide air connectivity to remote areas of Jammu & Kashmir, North-eastern regions, Andaman & Nicobar Islands, Lakshadweep and Tier-2 and Tier-3 cities. The revenue generated from Category-I is cross subsidized to cover losses due to the operations in Category-II. Recently, trading of Available Seat Kilometres (ASK) has been permitted under the scheme.

5. Airport Development
The budgetary support of the government has provided Rs. 4500 crore for revival of unserved and underserved airports. As per the Economic Survey 2018, this revival will be demand driven, depending upon on the commitments from the airline operators and the state governments. The Economic Survey 2018 further states that, the government has granted in-principle approval and site clearance for setting up 18 and 5 Greenfield Airports respectively.

6. Liberalisation of Air Services
The GOI took up the task to establish an India-Afghanistan Air freight Corridor in September 2016. In addition, an agreement on air services between India and Serbia has been liberalised and updated in May 2017. These developments will not only promote tourism and trade between the countries but also assure greater safety and security. Besides these, India has become the 1st country to draft a proposal of a NO-FLY list of passenger’s safety. The Parliament has passed the Anti-Hijacking Bill in May 2016 with new provisions and penalties. In February, 2017, Rajiv Gandhi National Aviation University, India’s 1st aviation university launched an executive aviation course for enhancing skill development in the aviation industry.

Section 3: data sources and methodology
In order to examine the efforts taken up by various airlines in adopting CSR activities previous year sustainability, environmental and annual reports of various aviation companies were studied. The study examined the reports of all 7 major airline operators namely Air India (No CSR), Jet Airways, Indigo, Spice Jet (after 15-16”), Vistara and Goa Air in the Indian context for 2017. Further, the CSR practices by country level regulators were also studied for United States of America, Australia and Dubai were

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7 https://www.aai.aero/en/udan

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considered. Further, selected international aviation service providers including Air New Zealand, Singapore Airlines, Japan Airlines, Emirates Airlines and Luftansa Airlines were also studied.

The study focused on relevant literature on sustainability, environmental and annual reports available on the airlines’ websites. The sample contains 13 airlines, seven from India and the rest six international airlines. The paper employed content analysis technique to garner details of CSR activity in the selected documents.

All the seven low cost airlines were considered while studying the Indian scenario on the other hand in case of international context, the sample was chosen using random sampling technique from a list of aviation companies.

**Section 4: Results and Discussion**

The next section looks at the efforts that have been taken up by various airlines in adopting CSR activities to contribute to the social wellbeing of different stakeholders associated with aviation sector. The objective focused on the annual reports, sustainability reports and environmental reports of various aviation companies and tried to understand the different CSR practices adopted by them. Before studying the individual companies operating in India, it is essential to study how various government agencies in the aviation sector have initiated various CSR activities in Indian Context. Towards fulfilling the commitments towards a greener environment, the Ministry of Civil Aviation (MoCA) under its airport development programme UDAN (Ude Desh ka Aam Nagrik) has undertaken a number of CSR initiatives. Kochi Airport has become the World’s 1st fully operational solar powered airport. The energy and water audits have been conducted in Airport Authority of India (AAI) since past few years. The AAI has taken up initiatives to impart vocational skills, to promote public transport, clean energy use, rain water harvesting and green buildings. AAI has set up sewage treatment plants to treat water at site to be reused for plantation; food waste to be converted to compost at site. Fixed electrical ground power (FEGP) has been set up at airports in place of Auxiliary Power Unit and there have been restrictions on the use of reverse thrust to combat air and noise pollution.

Besides these, the government has set up Rajiv Gandhi National Aviation University to offer high level degree courses on aviation. A total of 51 Aircraft Maintenance Engineering training centres and 29 flying training organisations have been set up with the approval of DGCA. Efforts have been made to make air-travel hassle free for differently abled.

**International context**

The International Civil Aviation Authority (ICAO) serves as a leader that has developed the Standards and Recommended Practices related to aircraft noise and CO₂ emissions from the aircraft operations. These practices are designed to limit the adverse impact of aviation on environment and are to be followed by 191 member states.

**United States of America**

In USA, the Federal Aviation Administration (FAA) under the US Department of Transportation is responsible for managing civil aviation system in the US. Understanding its liability towards the environment, the FAA makes all possible efforts to reduce the impact of flight operations on environment. The organisation has introduced NextGen green initiatives such as reduction in fuel consumption, use of alternative fuel, advancement in technology among others to reduce the impact of conducting business on climate. FAA also supports the government’s effort to promote social welfare. In this regard, the organisation aids ‘Fed Feeds Families’ initiative wherein the employees donate food to the needy families.

In its commitment towards promoting sustainability, the FAA focuses on reducing greenhouse gas emissions, improving energy efficiency, protecting water resources and preventive measures for pollution etc. Further, the employees of the organisation have made efforts to adopt and change aviation related advanced technologies impacting positively on the environment. FAA also supports and works with various organisations for the welfare of women and people who are differently abled.

**Australia**

In Australia, the Civil Aviation Safety Authority (CASA) is established as an independent statutory authority with an objective to regulate air operations in Australia and also the operation of Australian aircraft overseas. It is committed to provide safe work environment for its employees and is accountable to the environment for its actions of conducting business. CASA’s Workplace Diversity Program is developed to include aboriginal and Torres Strait Islander People, females, disabled, people from linguistically and culturally diverse communities and matured people.

The organisation has worked towards the health and well-being of the employees with special needs, has developed personal emergency evacuation plans and car parking spaces for disabled. Further, to fulfill its commitment towards the welfare of female employees, the authority has started various initiatives such as flexible working hours, made the workplace breastfeed friendly and paid parental leaves for supporting partners.

The authority has developed environmental management system to perform its duty towards social responsibility. The system is designed to reduce the impact of operations on environment. Some of the important initiatives taken to improve environmental performance are Conducting waste audits, Commencing waste recycling program, developing national car pool register to reduce GHG emissions, Energy efficiency measures, Increased usage of fuel efficient vehicles and increased use of videoconferencing as an alternative to air travels for businesses.

**Dubai**

In case of Dubai, The Dubai Civil Aviation Authority (DCAA) takes care of responsibility towards social and environmental well-being. As a part of its corporate responsibility, the authority has undertaken a number of initiatives that improve the welfare of employees as well as impact the environment positively. Participation by DCAA in ‘Reading Nation’ Campaign was aimed to build 2000 libraries in Arab and Islamic countries and to distribute 5 million books to children in refugee camps. The authority initiated Coffee Break meetings to be held every month to
encourage direct conversations with the senior level management. Towards its commitment on protecting environment, DCAA participated in Earth Hour initiative, organized by the Dubai Electricity and Water Authority, with the objective of protecting nature and promoting energy conservation. Other initiatives include organising free medical check-ups, gifting of Dubai duty free vouchers to female employees on mother’s day and participation in Dubai Car free day to encourage employees to use public transport. After studying the policies adopted by different authorities in India, USA, Dubai and Australia, it appears that Indian authorities have been proactive in taking a lead role in promoting a socially responsible environment in the country. Further, the policies adopted are at par with most of developed countries. To further narrow down our analysis we focus on CSR practices adopted by Individual airline companies in India and abroad. The next section talks about the CSR initiatives taken by different airlines operating in India and abroad.

**Indian operators**

**Air India**

After studying the annual reports of Air India, it was found that since the Company had not made any profits, it was not required to spend any amount for CSR activities. However, under its Corporate Environment Policy, it has pledged to implement green initiatives to reduce CO₂ emissions, noise and air pollution, fuel consumption etc., to meet environmental objectives by regular monitoring and thereby improving environmental performance. It also performs fuel efficiency gap analysis with the help of IATA and provides Green cabin sevices, fuel management services as its commitment towards social responsibility. The airline uses FwZ- Sabre flight planning system which is fully automatic software that optimizes the flight planning process. It provides complete data services on weather, route, speed and time thereby help in finding an optimal flight path that considers fuel costs and CO₂ emissions.

Additionally, Air India is promoting Adarsh Smarak with the support of Ministry of Culture by promoting films on India's historical monuments. The airline operated world’s 1st all-women flight on February 26, 2017 to promote gender equality.

**Jet Airways**

After studying the annual reports of Jet Airways, it was found that the airline had initiated Magic Box programme on Jan 07, 1997 to support the organisation- Save the Children India. Save the children, India is a fund raising programme which supports education, health and vocational training of unprivileged children. The airline has implemented the scheme on all domestic flights. In addition, the airlines has supported a number of NGOs in women empowerment, organises ‘Flight of Fantasy’ for unprivileged children on children’s day.

As a part of green initiative, the airlines has implemented an Action plan on Green Aviation strategy with a focus to reduce fuel consumption and thereby CO₂ emissions. The Humane Society International awarded Jet Airways the ‘2014 Henry Spira Humane Corporate Progress Award’ for its efforts to enforce a ban on the illegal trade of shark fins.

Furthermore, the airlines signed the ‘Buckingham Palace Declaration’ to support the fight against the illegal wildlife trafficking in 2016.

Additionally, the Airways has provided all the possible relief measures during natural calamities, ranging from donation of money to PM’s relief fund to operating additional flights to flowing relief cargo carrying packaged drinking water, food stuff, clothing and medicines. The airlines have also worked for the development, reconstruction and repair of damaged areas to help affected people rebuild their lives.

**Indigo**

In case of low cost career, Indigo it was found that Indigo works on the 4 key areas viz., Children & Education, Women Empowerment, Environment and Responsibility. By the end of FY2017, the team was engaged in 21 projects focusing these important areas.

With regard to children education and their social welfare, IndiGo has started a few projects. Through 6E Scholar, IndiGo provides mentor and scholarship to school children, who score 98 or above percentile in an IQ test, till they complete graduation. The Manas Primary School, an IndiGo initiative provides free education to underprivileged children in Gurugram. IndiGo in association with Bandhan kannagar started 400 primary schools in rural areas. In addition, the airlines sells girl power badges in its flights to support the education of girl children in Vishakhapatnam. In partnership with SEED, the airlines also work for the skill enhancement of women and youth.

To meet the objective of women empowerment, the airlines support Targeting the Hardcore Poor (THP) program wherein the families with no male earning members with a household income of maximum Rs. 1000 are targeted. The program works for the capacity building technical support to the women who head these families. IndiGo also helps in running of the Women Collective Action towards Environment Rejuvenation (WATER) in 3 districts of Jharkhand.

IndiGo, in its attempt to protect environment, signed Emission Reduction Purchase Agreement (ERPA) with Fair Climate Network (FCN) in 2013 to set up 5000 biogas units in Andhra Pradesh. By 2015, the number was raised to another 2500. Recently, another 2500 units were set up in Uttarakhand. The airlines also recycles the used waste paper with the help of the organisation ‘Greenobin’ and have recycled around 10,000 seat covers with the support of ‘Green the Map’. Further, the employees of the airlines as a part of their social and moral responsibility clean and maintain a stretch of 2 kms in gurugram. Another significant contribution is made towards providing relief and support to the natural disaster suffered areas.

Moreover, the airlines have worked in the field of health sector as well, ranging from spreading awareness to screening of diseases to providing health care medicines. It has also focused on creating awareness on the positive impact of fitness for a healthy and disciplined life. To serve this, the airlines have set up recreation centres in Jaipur, Chennai, Dimapur and Gurugram.

**Spice Jet**

The annual report of Spice Jet airlines found commitment
towards undertaking CSR activities in core areas of eradicating hunger, poverty and malnutrition, promotion of health care and sanitation, promoting education, gender equality, women empowerment, ensuring environmental sustainability, protection of national heritage, slum area development etc.

The company’s initiative ‘Spice Jet Cares’ is another important CSR platform designed to contribute to the society as a whole. The airline in association with ‘Anybody Can Help’ and Assam CM’s office provided relief measures during 2016 Assam flood. The company donated around 1500 food packets in Majuli islands. Further, it also handed out dal, rice, milk and medicines to Jorhat.

In addition, the airline has contributed to the needs of poor and sick and provision of education facilities through NGO SAPNA. The NGO runs two initiatives- ‘ANANDAM- A home for sick and destitute’ and SAPNA Shikshalaya – A School for underprivileged girls. The airline has also donated for various capacity building programmes in 2016-17.

In collaboration with Rotary Club of Chandigarh, the airline delighted underprivileged children of age between 12-14 yearsby operating a one hour special flight to Chandigarh under the initiative ‘Give Wings to Dreams’. Towards its commitment to conserve energy, the company has taken ample measures to reduce energy consumption by adopting latest technology in its operations. The company has undertaken green initiative to reduce paper usage by embracing electronic modes wherever possible.

**Vistara**

The Vistara Airlines Limited is a joint venture of TATA Sons Ltd and Singapore Airlines Ltd (SIA). As a part of CSR, the TATA group is committed to provide social services relating to health, education, skill, empowering women, and welfare of differently abled. A group CSR programme called Tata STRIVE provides information and technology to communities to achieve improvements in health, education and living standards. The programme’s skill development centre in Aligarh, is equipped with people from disadvantaged communities to lead a sustainable livelihood. It has also helped the weavers in Varanasi to upgrade to new technology and in finding newer markets. The employees of the organisation work generously to serve communities. The ProEngage programme gives volunteers the opportunity to use their skills and capabilities to help and serve NPOs.

In addition, towards climate change, the airline has adopted a two-way approach. On one side, it has included climate change in the TATA code of conduct and on the other, it has set up a climate change steering committee to make plans and policies. The steering committee works on ensuring that the companies under TATA group regularly measure their carbon footprint and forecast future footprints on the basis of their growth plans, motivate companies to adopt actions that help in reducing lifecycle footprint and work towards innovation for better growth prospects, Encouraging low carbon culture among TATA companies, Collaboration on sustainability projects, Generation of knowledge and sharing best practices to make work on climate change a global phenomenon, Exploration and adoption of technological advancement to make India a low carbon economy.

The airline, on its first anniversary, kick-started its CSR journey on October 16, 2014 in association with the Salaam Baalak Trust. The company organised painting competitions and sapling plantation for children aged between 7 and 14.

**International airlines**

**Singapore airlines**

From the study of relevant literature and annual report of Singapore airline, apart from considering its customers comfort and safety, the Singapore airlines is committed to work for the welfare of the employees, to ensure environment sustainability, to maintain high standards of corporate governance etc. The airlines won the Most Popular Graduate Employer award at the Singapore’s 100 Leading Graduate Employers Awards in 2016. In addition, the company strives to maintain a good balance between male and female workforce. In fact, there are more female employees than male employees working in the company in 2017. Further, the organisation has undertaken programs such as stretching at workdesk, Eat & exercise the right way, Group road run, Group Athletic Meets and Group games fest that promote health and wellness of the employees. These programs help to improve employee’s productivity along with employees’ continuous mental and professional growth.

The Singapore airlines work in close connection with suppliers to ensure and improve sustainability in all the processes of conducting its business. The company’s major component of supply chain includes in-flight food, fuel, aircraft maintenance and ground handling and it strives to follow best practices to secure sustainability. The use of biodegradable material, encouraging environment friendly proposals, regular monitoring of suppliers so that environmental management practices are followed, product innovation such as light-weight designs so as to reduce fuel consumption and recycling of scraps are some of the measures taken by the airlines.

Since past few decades, the airlines have been working actively to support charities and NGOs to promote education, health, sports and environment. In the field of art, the airline is working with National Arts Council and has contributed to the Singapore Symphony Orchestra, Singapore Dance Theatre, Singapore Lyric Opera and Singapore Chinese Orchestra. The company has donated to a charity event organised by Club Rainbow (Singapore), which raised funds for children education and also for the children who are suffering from a range of major chronic and diseases.

The airline has undertaken Harapan Rainforest Initiative in August 2010, which aims at protecting and restoring one of the world’s most threatened and bio-diverse ecosystem. The company also works with other countries for their social and environmental development. Furthermore, the airline is making efforts to achieve the global goals of stabilizing and reducing CO² emissions and of fuel efficiency. Some of the key initiatives under the fuel productivity improvement programme are:

- Adoption of fuel efficiency measures such as fleet-wide engine washing
- Improvement in flight operations to minimise fuel use without compromising safety
- Reducing weight on aircraft
Ways to find most fuel efficient routes
Reduce reliance on aircraft auxiliary power units with mobile ground power units
Improve flight operation procedures that reduce fuel burn

In addition, the airlines, in partnership with the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) Programme aims to reduce GHG emissions from fuel burn. Other initiatives include water audits, rain water harvesting, measures to save water, replacement of high bay lighting, waste management by using reduce, reuse and recycle policy. For example, a campaign, “Let’s Erase E-waste!” was launched in June 2016 to raise awareness among staff that old electronics should be recycled.

Japan airlines

In case Japan Airlines, in its JAL report, ‘Fly into Tomorrow’ talks about the Jal Group’s corporate policy. The Jal Group’s corporate policy is to achieve the triple goals of employee’s material and intellectual growth, quality services to customers and betterment of the society and environment. Besides ensuring passenger safety, the firm aspires to realize its corporate policy of solving society’s issues. The firm has used sustainable Development Goals (SDG) and ISO 26000 in identifying the key CSR issues-

- **Co-exist with the Earth**
  The firm has undertaken a number of initiatives to reduce CO₂ emissions resulting from flight operations. It includes introduction of fuel efficient aircraft, optimization of aircraft loads to reduce aircraft weights and regular cleaning of aircraft engines to improve fuel efficiency. In partnership with CONTRAIL project, the firm aims to improve the understanding of global warming and suggests measures to reduce it and address climate change. This is done by observing the distribution, movement and changes in the GHG.
  The Group also supports a research conducted by the Japan Aerospace Exploration Agency (JAXA) that is aimed at improving the satellite systems to monitor forest fires. The efforts are supposed to protect the environment and prevent the ill-effects caused by fires in the forests. In addition, the firm is in the process of developing the domestic aviation biofuel with the use of waste material in order to have a low carbon society. Further, the airlines supports Tohoku University’s greenhouse gas research project which uses the JAL Group’s aircraft to observe CO₂ emissions in the atmosphere. This is the world’s longest study, running for more than 30 years, of GHG using aircraft. The reduced use of auxiliary power units and closes window shades to reduce cabin temperatures, reduction in use of flaps, use of only one engine while taxing, adoption of reduce, reuse and recycle policy and curtailing water and electricity use are some other measures undertaken to care for the environment.

- **Contribute to the Society**
  The initiative Jal’s Visit Tohoku is aimed to support the earthquake prone region Tohoku, by assisting local communities in recovering from disasters with promoting industries and tourism in the area. Other initiatives include the projects that support the earthquake affected areas of Kumamoto. Through the Jal New Japan Project, the group tries to promote the region’s project by including them in their in-flight and airport operations. The airlines also provided classes and flight experiences called Wings of Tomorrow to school children of Kumamoto to give them an experience and career prospects in the field of aviation. Being a partner in Tohoku Cotton Project, the firm’s employee’s help in sowing seeds, weeding and harvesting the cotton fields. The project was launched in 2011 by agricultural corporations as an earthquake disaster recovery project.
  To support agriculture and marine products, the group promoted the use of Japanese indigo in rice cultivation and other products like cake called financier, deodorant spray that uses antibacterial properties of indigo etc. These products are made available for sale in-flight and on company’s website. The Jal Group also transports paintings and other artworks to promote Japanese culture in the world.

- **Nurture Future Generations**
  The Jal Group’s commitment to work for the children made it develop theme called ‘Bright Futures’. To support this, the group has launched JalSoraiku in 2016 with multiple objectives. Under the program, the airlines tries to encourage people to take aviation as career through JAL Factory Tours – SKY MUSEUM and JAL Career Talk for Students wherein the employees talk about their experiences and motivate students to boost their interest in the sector. The airlines also conduct workshops to discuss the problems faced by the world and explain how it is working to reduce CO₂ emissions to protect the environment through JAL sky eco classes.
  The group launched an initiative called Sky Baton to provide educational support to the disaster affected children of Tohoku Region. It has also donated education vouchers to many children under its connection with the Chance for Children association. With the aim of understanding and spreading Japanese culture, the group has launched the World Children’s Haiku project. Haiku is the world’s shortest form of poetry. Under the project, the children submit Haiku with a drawing to publish in an anthology ‘Haiku by World Children’. The piece of art is then donated to educational institutions and libraries around the world. The JAL group launched the Change for Good fundraising campaign for UNICEF on flights between Tokyo and New York to collect donations from passengers. The proceeds of the campaign is used for the protection of health and rights of the children.
  Besides achieving these triple goals of Jal group’s corporate policy, the group tries to eliminate the discrimination of gender, age race, nationality, social status, disability and sexual orientation by employing them in their airlines. It believes in strengthening its relationship with its suppliers and has developed an action plan for the Tokyo 2020 Olympics and Paralympics.

Emirates airlines

In our study Emirates Airline, the official international airlines of the UAE it was found that under the frame of CSR policy, the airlines work in the direction of improving
environmental performance, providing support for conservation efforts and development of the community. The airline operates the one of the youngest aircraft fleet, thereby reaping the benefits of lower engine and noise emissions. With a view to help achieve the United Nation’s Sustainable Development Goals of Affordable and Clean Energy (SDG 7), Sustainable Cities and Communities (SDG 11), Responsible Consumption and Production (SDG 12), Climate Change (SDG 13), Life below Water (SDG 14) and Life on Land (SDG 15), the airline has undertaken various initiatives including (1) use of modern and fuel efficient aircraft- The fleet renewal programme helped reducing the average fleet age to 5.3 years. (2) Use of ground-supplied power instead of the aircraft auxiliary power unit and use of fuel-saving operating techniques- Idle reverse thrust on landing and turning off engine while taxiing in saved a total of 19,250 tonnes of CO2. (3) The flight operation specialist worked with air traffic management around the world for a year to provide more efficient flight routings and operational procedures which would help in reducing flight times, fuel consumption and emissions. As a part of this, the airline undertook an international demonstration flight for System-Wide Information Management (SWIM). (4) The airline’s project on staff transportation scheme helped in eliminating 16000 trips and in reducing 171 tonnes of CO2 emissions. This project was given the Dubai Award for Sustainable Transport in Mobility Management. (5) Operating low-emission low-noise aircrafts that meet international standards and employing electric vehicles- Dnata8 expanded its fleet of green services to provide 86 hybrid or electric vehicles in Dubai. The airlines acquired an electric Bolloré Bluecar for ramp operations and all trucks operate on low-sulphur diesel. (6) Investment in renewable energy- one of the most significant steps towards adopting renewable energy is the installation of one-megawatt array of solar panels at the Emirates Engine Maintenance Centre. The array generated 1403 megawatt of electricity over the year and thus helped in saving significant amount of carbon emissions. (7)Switching to LED lighting saved more than 237 megawatt hours of electricity in a month. (8) Dry washing of aircrafts saved around 11 million litres of water in a year. (9) The airline made new economy class blankets from recycled plastic bottles. (10) The ‘Think before you print’ campaign saved million tonnes of paper and thus hundreds of trees. With a view to protect wildlife and biodiversity, Emirates conducted various awareness campaigns with the support of United for Wildlife, against the illegal trade in wildlife and wildlife products. In addition, Emirates run various initiatives for supporting the wildlife and ecosystem conservation, such as ‘Dubai Desert Conservation Reserve’, ‘Emirates one & only Wolgan Valley’, ‘A Greener Tomorrow’ and ‘dnata4good’. Further, the Emirates employees presented a wall collage which was displayed at the headquarters. Each employee contributed to the foundation, the proceeds of which was given to provide education and health services to the less privileged children around the world.

To promote reading and make Arabic literature accessible, the airline launched an initiative called ‘Celebrating Arabic Reading’ with the help of Google.

**Lufthansa airlines**

During the analysis of Lufthansa Airline, the largest German airlines and in Europe in terms of both the fleet sizes and the number of passengers carried it was found that the company strives to work for the betterment of company-employee relations and to ensure safeguard measures for climate and the environment. The airline has its sustainable agenda that has responsibility towards economic sustainability, Corporate Governance and compliance, Climate and environmental responsibility, social and product responsibility and corporate citizenship. The Lufthansa Group is also bound by the guidelines laid by the United Nation’s Agenda for 2030 sustainability. To serve the guidelines, the airline has made a number of efforts.

**Going Digital:** The airline aims to become the most digital airline group in the world. The concept of going paperless could save 27 tonnes of paper in a year. E-journals, Customer Service Apps, digital baggage services flynet are a few services provided by the airline in this direction.

**Fleet Modernization:** The group’s aircraft has been replaced by modern and fuel efficient aircrafts over the years. The concept of fleet harmonization has helped in reducing maintenance and acquisition costs. A320neo is one of the new aircraft that is 20 per cent cost effective, lower co2 emissions, emitting half noise pollution and more seat capacity. Another aircraft A350-900 with 25 per cent less fuel consumption and less CO2 emissions and comparatively quieter operation was introduced in 2016.

**Climate Change:** The goal of the airline is to limit the environmental effect of flying. It aims to improve fuel efficiency by 25 per cent between 2006 and 2020 or 1.5 per cent per year till 2020. The airline has forecasted that the net CO2 emissions will decline by 50 per cent by 2050. The Lufthansa Group maintains its fuel consumption at low levels and also carries out diligent research to find alternate fuels that significantly reduces emissions from flight operations. The project ‘BurnFAIR - Potentials of alternative fuels in operational conditions’ is a step in this direction. Another project report on “High Biofuel blends in Aviation” was also submitted for European Union project in 2013.

**Energy Conservation and Waste Management:** The group is planning to increase the recycling ratio in 2018 as measured by Waste per meal in grams, energy consumption per meal and waste quantity recycled as percent of total waste. The airline also imparts employee training and workshops on sustainability. An initiative called ‘Flygreener’ was launched with an objective of reducing flight waste volumes in flight operations.

**Air New Zealand**

Air New Zealand is the top most airlines as per the Forbes list in 2018, based on the factors including fleet age, passenger reviews, investment ratings and operational safety. The organization has its commitments towards greener planet, climate change, and also towards social and economic well-being of its employees. The airlines has set its goals that covers employee engagement to ensure high performance, innovation, community engagement,

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8Dnata is one of the largest combined air services providers in the world and the largest travel management services company in the UAE.
stabilizing carbon emissions, diversity and inclusion.

Air New Zealand was awarded as the most attractive employer in 2017. The airlines target to have 40 percent of women participation in the senior leadership team by 2020. In 2017, the organisation has made significant progress and reached the level of 39 percent women working. Further, 7 percent of the pilots are women. In partnership with Walsh Flying School, the airlines train young females who aspire to become pilots.

The airlines have built up a Greenteam with a focus to support nature by performing conservation activities in partnership with Department of Conservation. More than 200 employees and around 100 family members participated in 18 Greenteam events across the country in the last year. In addition, the airlines, in connection with various stakeholders, work on a biodiversity project focusing predator eradication on Whangamuri river.

In 2017, the airlines donated around $400000 to more than 75 charities. Eat my lunch:a social enterprise came up with around 13000 lunches to underprivileged children. The airlines contributed to this initiative by hiring the organisation for corporate lunch. During the time of natural disasters, the company provided cargo handling services, food packets and medical relief to the people in need. This was done by the Air New Zealand’s Special Assistance Team wherein employees are trained to provide relief measures in emergency events effect.

Further, the airlines have fitted noise reducing vortex generators to reduce noise pollution on airports. In addition, the organisation aims to improve average annual fuel efficiency of 1.5 percent by 2020, which is around 49,000 tonnes of CO₂ per annum. Besides these, the airlines is making efforts to replace traditional fuels with sustainable biofuels, saving fuel while taxiing, enabling aircraft to accelerate to optimum speed earlier after take-off etc.

Summary and conclusion
The paper examined relevant literature on sustainability, environmental and annual reports available on the airlines’ websites for 13 airlines, seven from India, six for international airlines by employing content analysis technique to garner details of CSR activity in the selected documents. Through the in-depth analysis of CSR reports, it was found that all airlines operating in India have started reporting CSR practices over the last years especially after the implementation of Companies Act 2013, which made it mandatory for corporations in India with revenues of more than 10 billion rupees to give two percent of their profits towards CSR along with having a CSR committee and reporting CSR in their annual reports. Further, it was also evident from the reports that CSR commitments and reporting was more comprehensive in case of Indigo Airlines as compared to other players. The airline covered almost all areas of CSR including environment, social inclusion, women empowerment, skill enhancement etc.

Further, as compared to airlines operating in International context, one significant difference which was found that in case of India, the CSR reports were part of Annual reports on the other hand most of the international airlines were publishing separate reports on environment and sustainable development. In fact, many international airlines published reports on their websites to inform different stakeholders about their commitment and progress which was absent in most of the Indian airlines except for Jet Airways. Further, the airlines in Indian context have focused on two main types of CSR dimensions i.e. environment and social. Within the environment dimension activities including reduction of fuel consumption, introduction of new-fuel efficient aircraft and reduction of CO₂ emissions were common. For social dimension women empowerment, promoting education were also among the common activities across airlines. Further, initiatives like providing equal opportunities for women at workplace also listed as an important component of CSR agenda of different airlines. Lastly, it was also observed that most of the airlines relied on NGOs for carrying out the CSR activities related to humanitarian projects in backward areas in the country.

To conclude, we can say that although awareness about CSR reporting has grown especially during the last five years after 2014, however considerable scope of improvement is there when compared with international counterparts. Further, other than environmental and social dimensions more focus is required on waste management, recycling through innovation and other neglected dimensions of CSR. Further, publishing of separate environmental reports in a common format can be adopted to improve CSR reporting in India. Furthermore, the companies should also focus on impact assessment of the CSR initiatives so that CSR resources are efficiently utilised.

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