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## IMPACT OF CSR, SMART CITY PROJECTS ON ECONOMIC DEVELOPMENT IN ODISHA

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### **Abstract:**

The purpose of research is to investigate the CSR activities of project companies under Smart City Mission alongwith the impact of CSR of smart city projects on economic development. 87 samples are collected randomly from professors of different MBA and Engineering colleges and regression analysis is used to analyse. Although the project companies are not practicing CSR significantly, but the CSR of project companies will have an affirmative impact on the economic development in Odisha. If CSR will be being practiced well by the project companies under smart city projects, definitely there

will be a positive impact of CSR on economic development and expected positive influence on the service sector development and peripheral agri-business development and employment creation. The research is carried from the period of 2018 to 2022. The result of the same is forwarded for studying the other smartcities in India.

**Keywords:** Corporate Social Responsibility, Project Companies, Smart City, Smart Development, Economic Development, Service Sector, Agri-Business, Employment

## **1 Introduction**

The global economic trend since 1950 to future trend 2050, forecasts the massive movement of rural people to the urban (Reynolds et al., 2015). There is a big gap between the demand and supply of modern infrastructure, has arisen due to technological development and services advancement. The population growth in major cities made hectic to the living standard of people (Judge Ahluwalia, 2011). Here, the Government of India is the main launch pad, where both Government and private companies support finance and facility (Kumar, 2017) for restructuring the cities. The concept of smart city has come from Europe (Myeong et al., 2022) to India. According to (Vishnivetskaya & Alexandrova, 2019), the concept of smart city leads to facilitate a safe, secure, environmental friendly and technological adoption and modern infrastructure to the cities to improve quality of living standard of people and acts as the stimuli of economic growth. Nothing is clearly specified to public in public information system, although the smart city aims to provide transparency, accountability, communicative and quick and quality services to the citizens (CITIZEN'S CHARTER OF ROURKELA SMART CITY LIMITED Contents, n.d.). Converting the conventional street lighting to LED lighting to save the energy expenditure (Strielkowski et al., 2020) is one of the examples of excellent services in smart city. (Randhawa & Kumar, 2017) also agreed that the concept of smart city has come from European counties to Asian countries, then to India. The notion of reach, range, and reason are prioritized to pursue the development (Kumar, 2017). Addition to this, the economic growth, social commitments and democratization are considered in the practice (Kumar, 2017). Corporate social responsibility as per the sustainable development goal (SDG 3) in implementation of smart city projects (Morozova & Yatsechko, 2022) is understood .

In search of the CSR practice of companies involved in Smart City Projects, the question arises, "Is there any relationship between CSR activities and the activities of Smart City Project"? There is a definite role of Corporate Social Responsibility in the Smart City Project in Spain (López-Arranz, 2017). Here, the author tried to built the relationship between the CSR activities and activities of Smart City Projects.

Smart City project has proved that the project is implementing not only SDG 3, but also implementing the range of SDGs 11-13. (Vishnivetskaya & Alexandrova, 2019) have integrated modern facilities, technology, infrastructure, sustainable city development, life safety and economy growth in smart city concept to envisage the improved life style and condusive natural environment. (Brekke, 2021) has specified about the positive role of education in regional economic development, wherein the high-tech will have greater participation in educational development. But the question aries of (1) Whether the project companies involved in smart city project, practicing CSR locally? and especially in education, (2) Whether the CSR of smart city project companies have any impact on economic

development in Odisha? The analyses of CSR1-ED, CSR2-ED and CSR3-ED, states that correlation between CSRSCP and ECODEV is verymuch negligible but influences each other strongly. If CSR will be being practiced well, defititely there will be a positive impact of CSR on Economic Development.

## **2 Literature Review**

(Sidorov & Sidorova, 2022) has shown the socio-culture development through digital platform. How the platform has simplified the mobility of people in daily life by the means of rented vehicle, transportation and others as well? Such flexible digital culture has become the driver for socio-economic development and socio-cultural development. (Kulembayeva et al., 2022) has denoted that the outsourcing business model is most efficient in modern business world. The authors have understood the risk factors of smart city and suggested to the entrepreneurs to approach corporate social responsibility as per the sustainable development goal (SDG 3) in implementation of smart city projects (Morozova & Yatsechko, 2022). As per the study of (Chang et al., 2021), the start-ups from Taipei, contacted to Taipei Smart City Project Management Office, for providing proposal of smart solution to daily living, education, healthcare environmental, energy, lighting, security and recycling etc. The tourism is also focused in smart city projects for better sustainability, facilitated by information technology, communication and destination accessibility for (Ivars-Baidal et al., 2021). The actual smart city project has proved that the project is implementing not only SDG 3 but also implementing the range of SDGs 11-13. The same implications are visible in smart cities of Odisha as separate roof shed and flooring vegetable vending zone for rural vegetable sellers in city. The regional economic development should be there in case of any development work (Brekke, 2021). (Irvine et al., 2022) have mentioned the smart village concept and the expected benefits of sustainable energy, employment and economic growth. Irrespective of smart city challenges, there is a possibility of the variation in level of employment and socio-economic status of people (Gandy & Nemorin, 2020). In smart city mission, the local, social, economical, cultural, political and environmental deficiencies are considered for developing them (Verrest & Pfeffer, 2019). According to (Vishnivetskaya & Alexandrova, 2019), the concept of smart city leads to facilitate a safe, secure, environmental friendly and technological adoption and modern infrastructure to the cities to improve quality of living standard of people and acts as the stimuli of economic growth. When CSR will increase, a fund will be generated to maintain the urban facilities to make life of the cities better. Such facilities will attact the investors to invest in the smart city (Randhawa & Kumar, 2017) which will create new avenues for employment. There is a definite advancement in the society (López-Arranz, 2017).

According to (Aijaz & Hoelscher, 2015), the Smart City Mission is initiated by Modi Government in India, with the aim to achieve living condition improvement and economic growth in selected 100 cities in India in year 2015. (Chang et al., 2021) have identified the smart city as the political strategy as a Governmental policy, idea to reallocate the resources through infrastructure and technology. From Europe (Bhattacharya et al., 2015) to India, in first step, where smart city concept is identified and implemented periodically. According to (Irvine et al., 2022) and (Vishnivetskaya & Alexandrova, 2019), smart city leads to facilitate a safe, secure, environmental friendly and technological adoption.

In conventional cities, people are suffering from many problems, relating to water, electricity, safety, hospital, traffic and education (Randhawa & Kumar, 2017) and (“Smart Cities Constr. Technol.,” 2020). But the progressing project have made severe dust, road blockage, damage of existing drainage system and the wide holes in road and made the life devastated. (Aijaz & Hoelscher, 2015) had also pointed out the quality of life index, income, employment, health, education, environmental quality, mobility and social connectivity, which are in challenging phase, facing accident and assault. Therefore, the continuous assessment of development is to be observed for addressing major social issues (Aijaz & Hoelscher, 2015). Smart city project is a difficult project (Challenge of Making Smart Cities in India Rumi AIJAZ, 2016) to understand and implement. The smart city aims to provide transparency, accountability, communicative and quick and quality services to the citizens (CITIZEN’S CHARTER OF ROURKELA SMART CITY LIMITED Contents, n.d.). The social and structural change have forced to study the social responsibilities of the project companies.

Later on, the literature review was the way to forward the research. Urban cities in India are suffering from shortage of infrastructure, road blockage, pollution and shortage of natural resources (Randhawa & Kumar, 2017). The disposal of human, animal, vehicles and industries made the city unsafe and unhealthy to live a healthy life. Schaffers, (Schaffers et al., 2012) had argued about the smart city vision and effort in grassroots in smart city development. (Kumar, 2017) had argued about the de facto and de jure of urban development with a view of planned and actual work progress. Is there any model to maintain the city safely? No doubt, the Government will provide all the modern facilities for better living of human life. Government is not only responsible to maintain and provide safeguard to all the facilities but also others have. According to (Challenge of Making Smart Cities in India Rumi AIJAZ, 2016), (Aijaz & Hoelscher, 2015). In 1997, Smart City concept had arrived to limit CO<sub>2</sub> emissions for sustainability includes three dimensions, i.e. 3E’s- Environment, Economy, and Equity (Berke, 2002), later on urbanization promotion (Randhawa & Kumar, 2017) as regards to problems of CO<sub>2</sub> emissions, as example of European Union and Russia. Purposefully the policy is framed in respective countries (Huovila et al., 2011). In the following years, the internet based infrastructure has become the backbone of the city (Schaffers et al., 2012) to focus on communications, energy and utilities, healthcare, insurance, retail, transportation, with the objective to provide a better quality of life and improve the city. Converting the conventional street lighting to LED lighting to save the energy expenditure (Strielkowski et al., 2020) is one of the services in the project. According to (Randhawa & Kumar, 2017), the project has revealed by (Kumar, 2017) in the strategic dynamism with changing context. The water treatment through sewerage network and dumping of untreated storm water into rivers, etc. are leading to pollution (Reynolds et al., 2015). The priority, process and result is denoted by (Kumar, 2017). The question arises that “is there any road map from urban to rural?”, in smart city mission plan. Answer to this suitable questions is answered by the authors, (Batty et al., 2012) that as they had predicted the future of smart city in the scope of internet enabled, networking, integrated database, travel behavior, urban land use, transportation, economic interface and smart structure of smart city. But the impact of above facilities on living standard and economic development is not so clear. However, the authors, (Sidorov & Sidorova, 2022) has shown the socio culture development through digital platform in MOSCOW. Irrespective of smart city challenges, there is a possibility of

the variation in level of employment and socio-economic status of people (Gandy & Nemorin, 2020).

### **2.1 CSR Activities of Projects Under Smart City Projects**

(Randhawa & Kumar, 2017) has given recommendation to Government of India to provide social protection to the people who are poor and do not have proper employment under the city development. (López-Arranz, 2017) has highlighted the workers' social welfare as the corporate social responsibility of smart city project, alongwith employment, housing and energy, with a special reference to Spain. However (Reynolds et al., 2015), administrative process involment unable to achieve the actual development and economic progression (Naphade et al., n.d.). Recently, The authors have understood the risk factors of smart city and suggested to the entrepreneurs to approach corporate social responsibility as per the sustainable development goal (SDG 3) in implementation of smart city projects (Morozova & Yatsechko, 2022). The actual smart city project has proved that the project is implementing not only SDG 3 but also implementing the range of SDGs 11-13.

### **2.2 Economic Developments**

However, the authors,(Sidorov & Sidorova, 2022) has shown the socio culture development through digital platform in MOSCOW. How the platform has simplified the mobility of people in daily life by the means of rented vehicle, transportation and others as well? Such flexible digital culture has become the driver for socio-economic development and socio-cultural development. Now the insfrastructure development, facilities and governance are well coordinated in many smart cities in India. Due to smart city challenges of employment and socio-economic status of people, (Gandy & Nemorin, 2020) have integrated modern facilities, technology, infrastructure, sustainable city development, life safety and economy growth in smart city concept to envisage the improved life style and condusive natural environment. (Brekke, 2021) has specified about the positive role of education in regional economic development, wherein the high-tech will have greater participation in educational development. The regional economic development is the road to attract the investor to the city and to create employment opportunities and moreover to enhance the local market and gross domestic product (GDP),(Randhawa & Kumar, 2017).

### **2.3. Impact of CSR on Economic Development**

(Yang & Basile, 2019) has approached to engage the CSR as the strategic approach to Smart City development for sustainability, where the companies are responsible for their activities and their impact on the society. CSR affects the Smart City model, which is developed to lead the urban life. There is a definite role of CSR in smart city development in order to have social, political and economical advancement in the society (López-Arranz, 2017). Due to smart facilities, new investment will create new employment in the city (Randhawa & Kumar, 2017). The focused CSR on economical advancement, political interest and smart social structure will have definite impact on employment generation, leads to economic development. The smart city projects increase the efficiency and provide better services, simultaneously reduces the poverty, unemployment, social segregation and environmental deprivation (López-Arranz, 2017). Which are the basics of CSR. Clearly visible there is an impact of CSR of smart city projects on economic development i.e. employment generation,

environment protection and social wellbeing etc. As per the study by (Challenge of Making Smart Cities in India Rumi AIJAZ, 2016) on challenges of making smart city in India, the city development uses the agricultural area of rural area for new construction, impacts adversely on food and grain production. The solution to standard development is facilitated by the facilities of E-governance (Schaffers et al., 2012). The shift in thinking drives in efficiency, proposals to deliver the result to attract the citizens and business in smart cities (Nowicka, 2014). Argued to this, there must be social responsibilities of companies under smart city mission.

The Smart City concept is mostly related to concepts of CSR. (Bonte, 2018) as clearly mentioned the direct role of CSR on Economic Development, as impacted, GDP, Public Investment and Urban Economy will grow. The completion of project is one time job, but the maintenance of smart city project is a continuous process. Many service provider and corporate will act on it. Then, why their CSR is not focused in smart city projects? With the vested objectives of the research to study the CSR activities of SMART CITY project companies and to examine the impact of CSR of SMART CITY projects on economic development. As per the study of (Chang et al., 2021), the start-ups from Taipei, contacted to Taipei Smart City Project Management Office, for providing proposal of smart solution to daily living, education, healthcare environmental, energy, lighting, security and recycling etc. Irrespective of smart city challenges, there is a possibility of the variation in level of employment and socio-economic status of people (Gandy & Nemorin, 2020). In smart city mission, the local, social, economical, cultural, political and environmental deficiencies are considered for developing them (Verrest & Pfeffer, 2019). Such facilities will attract the investors to invest in the smart city (Randhawa & Kumar, 2017) which will create new avenues for employment. There is a definite advancement in the society (López-Arranz, 2017). According to (Vishnivetskaya & Alexandrova, 2019), the concept of smart city leads to facilitate a safe, secure, environmental friendly and technological adoption and modern infrastructure to the cities to improve quality of living standard of people and acts as the stimuli of economic growth. The authors (Morozova & Yatschko, 2022) have understood the risk factors of smart city and suggested to the entrepreneurs to approach corporate social responsibility as per the sustainable development goal (SDG 3) in implementation of smart city projects. The actual smart city project has proved that the project is implementing not only SDG 3, but also implementing the range of SDGs 11-13. (Brekke, 2021) has specified about the positive role of education in regional economic development, wherein the high-tech will have greater participation in educational development.

The Surat Smart City Development Limited has adopted CSR in the smart city development to provide justice to people and environment of surat at a large extent of (Bowman, 1975). According to (Bonte, 2018), GDP, Public Investment and Urban Economy will grow due to the positive impact of SmartCity development on Economic Development.

But the question arises of (1) Whether the project companies involved in Smart City Project, practicing CSR locally? (2) Whether the CSR of Smart City Project companies have any impact on Economic Development in Odisha? The research gap appeals to study the CSR of project companies under Smart City Project. Whether they practice CSR or not? Because the smart city project is a big financial deal with a huge capital investment, leads to public expenditure. If the project companies are practicing

CSR activities, the second study is a alluring point of research. Then, the second study aims is to examine “Is there any impact of CSR of project companies under smart city mission on Economic Development?” (Bonte, 2018) has defined the positive impact of Smart City Development on Economic Development. (Yang & Basile, 2019) regards to the study, CSR is being used in Smart City Development for Smart Governance, Smart People, Smart Environment, Smart Living, Smart Mobility and Smart Economy. The research gap is the way to the search of the relationship between CSR and Smart City Project, impact of CSR of Smart City Project Companies on Economic Development in Odisha.

### **3 Theoretical Background**

The smart cities mission was launched on 25th June 2015 in India with the objectives to provide ultimate solutions to urban problems such as water supply, sanitation, energy, electricity, housing, transportation, mobility, environment, health and education. 100 cities in India are included in smart city mission. The economic development and enhancement of quality of life of the people leads to the smart cities mission (Bhattacharya et al., 2015). The solution to standard development is facilitated by the facilities of E-governance and Citizen Services, Waste Management, Water Management, Energy Management, Urban Mobility, (Kumar, 2017). The shift in thinking drives in efficiency, proposals to deliver the result to attract the citizens and business in smart cities (Nowicka, 2014). Whether smart city mission is a need based project or sustainabale based project, is simply unanswered. The benefits of such projects are mentioned in many literatiures but the beneficiaries are not mentioned categorically. Highly essential to understand the need of mission subjectively.

#### **3.1 Need of Smart City Mission**

The concept of smart city is related to economic development, modern facilities, high living standard and environment friendly society in the city (Vishnivetskaya & Alexandrova, 2019) has arose the need of smart city mission is felt (Kumar, 2017) and planned accordingly. According to McKinsey Global Institute data, Indian Economic growth from 2002 to 2012 has given growth to GDP at 7.7% annually” (Kumar, 2017). But the infrastructure development is failed massively in all over Indian cities, Metros and sub- urbans also. Apart from the infrastructure, the garbage management is one of the basic needs of now in all cities, which creates a lot of environmental diseases. The utmost solution to the make life better in the cities, alerts the need of mission. According to the statistical report of Government of India (2013), The environmental issues as parallel to plantation program are not mentioned in agenda of the smart city mission. (Huovila et al., 2011) also alarmed the need of smartcity.

#### **3.2 Expected Advantages of Smart City Mission**

(Vishnivetskaya & Alexandrova, 2019) denoted the benefits smart city leads to facilitate a safe, secure, environmental friendly and technological adoption and modern infrastructure to the cities to improve quality of living standard of people and acts as the stimuli of economic growth. There will be a possibility that the investors will come to invest, reside and start new venture in the smart city (Bhattacharya et al., 2015). The business will flourish in the periphery areas of smart cities. The service sector will increase in near future. The manufacturing will increase significantly. Meanwhile, the main

focus of smart cities on the sustainable and improve quality of life and economic growth will come to true with the increase in trade and business in the cities.

### **3.3 Major Project Companies under Smart City in Odisha**

Two cities such as the state capital of Odisha, Bhubaneswer and Industrial city Rourkela are under the smart cities projects. The economic structure of Odisha mainly depends on such both cities since last fifty years. The projects under smart cities in Odisha identifies the the development towards area based development, smart city smart solutions, social smartness. It includes jatayat, jaladhara, integrated information settlement centre, smart paribahan etc. (Kulembayeva et al., 2022) has denoted that the outsourcing business model is most efficient in modern business world. In the same way of thought, the smart city project has also done outsourcing of project activities among many project companies in India. Specially segregated the development projects into Area based Development, Pan City Smart Solutions, Social Smartness etc. Many companies are engaged in the development work in these cities. Starting from IT solution to Infrastructure companies are the main participants in this project. IBM, TCS, TATA, Birla, L&T, Mahindra, Deloitte, McKinsey, Mecon, GAIL and many consulting firms are the participants in development work of Smart Cities in Odisha. Cement Companies, Steel rod Companies, Cable Companies, Cycle Companies, Bus Companies, Led Bulb Companies and many more, who are the direct supplier to the Smart Cities Projects in Odisha. Henceforth, many maintenance or service oriented companies are engaged in this project. The direct or indirect employments are generated in this project.

### **3.4 Corporate Social Responsibility of Smart City Projects**

The project companies are engaged in smart cities mission, especially in the road and bridge construction, sewage construction, traffic control, toilet making, drinking water piping company, and IT enabled infrastructure include infrastructure companies, transportation Company, Bus Company, medicine companies, medical equipment companies, IT companies, smart classes and all service enabled companies etc. Simple to state that all the implementing agencies which engage in smart cities mission should have social responsibilities. Because the companies are using many more resources of the place and makes profit also. The change of moderate to modern facilities disturbs the human life and others. In this process, the employment opportunities increase in the society. The companies for which purpose they work in smart cities mission, those are also elements of corporate social responsibilities (CSR). However, activities of smart city Mission are as similar to as the CSR. The question comes, whether the companies as implementing agencies are providing the same or not. (López-Arranz, 2017) has justified that the role of CSR of smart city projects has to focus on the social, political and economic advantages in the the concern society. Such facilities will attract the investors to invest in the smart city (Randhawa & Kumar, 2017) which will create new avenues for employment. Opposing to the smart development, (Aijaz & Hoelscher, 2015) has confined to the city development, leads to use of rural area in city development is detrimental to food and grain production in agricultural land in rural. Here, somehow the CSR of smart city projects will balance the development and growth. In Table 3, the CSR fund is mentioned but the utilization of CSR fund is not mentioned in any govtment portal.



**Table 3 Capital Cost (Year 2016)**

<b>CAPITAL COST (Figures in INR Crores)</b>			
	PAN CITY	AREA BASED	TOTAL
Total Capital Cost Funding	869.03	1702.24	2571.27
AMRUT	140	74.31	214.31
PMAY	0	112	112
SBM	93.76	0	93.76
IPDS	0	119	119
SOLAR CITY	0	23.27	23.27
SMART CITY MISSION	317.18	680.16	997.55
PPP	0	334.34	334.34
CSR		29	29
STATE GOVERNMENT	30	286.16	316.16
NULM	0	9	9
ADB	129.09	0	128.09
KFW	160	35	195
<b>Total Capital Cost Funding</b>	<b>869.03</b>	<b>1702.24</b>	<b>2571.27</b>

Source: <http://rmc.nic.in/Citizen%20Charter.pdf>

### **3.5 Economic Development**

According to data, Census 2011(India), the Smart Cities Mission has contributed 63% to the GDP of India. Due to the Growth of urban area, 40 percentage of Indian population will live in Urban by 2030. The same will contribute 75% to India's gross domestic product (Bhattacharya et al., 2015). The inequalities bring about poverty and livelihoods of 270 million people (22%) remain below official poverty line of 1.25 dollar a day (Kumar, 2017). On the other hand, the city development reduces agricultural land, reduces food and grain production in the adjoin rural areas (Challenge of Making Smart Cities in India Rumi AIJAZ, 2016). But the smart city facilities will attract the investors to invest in the smart city (Randhawa & Kumar, 2017) which will create new avenues for employment will be lead to advancement in the society (López-Arranz, 2017). The regional economic development should be there in case of any development work (Brekke, 2021). The tourism is focused in smart city projects for better sustainability, facilitated by information technology, communication and destination accessibility for (Ivars-Baidal et al., 2021). The start-ups are well supported by digital platform and smart administration in smart city (Wirtz et al., 2021), due to the smart Governance and digitalization of public sector services in the mid-sized German city.

### **3.6 The Governance Challenges**

District Development Plan is prepared, but far away from the implementation. This block of de jure to de facto in SmartCity master plan (Kumar, 2017). The official development plans are still in box not is a out of box. The political interest, social interest, economic interest and environmental interest are taken into consideration before implementation of project and at the time of progression of the project. Smart city mission addresses a big issue based society to reform it for providing better living

to the people. Major difficulties for the Government is to maintain and sustain the mission. The clear picture of municipality corporation is seen to all adversely, then there is a big challenge to Government regarding the well being of such mission.

### **3.7 Infrastructure Development**

A city to become smart should be sustainable, foster good governance for achieving sustainability and lay emphasis on latest technology and innovation. There are eight critical pillars of India's smart city programme such as 1. Smart Governance, 2. Smart Energy, 3. Smart Environment, 4. Smart Transportation, 5. Smart IT and Communications, 6. Smart Buildings, 7. Smart Health Hospitals, 8. Smart Education. Surprisingly, nowhere the smart environment is mentioned. Preservation of natural environment is also neglected. Explained components of smart city mission in India by (Randhawa & Kumar, 2017) are included to develop quality infrastructure in the city. As per the study of (Chang et al., 2021), the start-ups from Taipei, contacted to Taipei Smart City Project Management Office, for providing proposal of smart solution to daily living, education, healthcare environmental, energy, lighting, security and recycling etc. The Department of Economic development has also initiated to uplift the smart housing, smart bus stop, smart parking, smart transportation and smart street lighting through internet of things (IoT). The Department of Health care of Taipei has also taken steps to avail the Smart health care system, elder care system through Cloud. The Department of Environmental Protection has also worked on the monitoring of air quality through Air Box.

### **3.8 Smart City Mission in India and Current Development in Odisha**

JNURM (Jawaharlal Nehru Urban Renewal Mission) was started in 2005 and after a decade in 2015, transformed to SMART city Mission and AMRUT (Atal Mission for Rejuvenation and Urban Transformation). SMART city mission 2015-16 to 2019-20 will bring more than 100 cities in its jurisdiction. AMRUT city mission 500 cities will be covered having population more than one Lakh, AMRUT city mission will be considered as supplementary to SMART city mission. The Government of India has taken bold steps towards meeting Urban Infrastructure and livable cities through the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) programme. Many development work are in confusing stage in year 2018-2019, parallel to the AMRUT or JNURM or SMART CITY. The information to public is purely unclear. Presently in year 2020 and 2021, the smart city mission has adopted the smart electrification by LED street lights and city cleaning by electric vehicles instead of rickshaw. Tourism is also focused at Rourkela. Road and Bridge infrastructure projects are slowly progressing. Health sectors are alarming to quality. Local people are also getting employment opportunity in ongoing projects. Urban to rural connectivity is developing in the faster pace, which will have future impact on economic development.

### **3.9 CSR, Smart City Projects and Economic development**

In smart city mission, the local, social, economical, cultural, political and environmental deficiencies are considered for developing them (Verrest & Pfeffer, 2019). Earlier to this study, the another authors had also studied about the aim of smart city model to have innovation and entrepreneurship and a new economy in the smart city (Myeong et al., 2022). Many contingencies of urban city are to be solved

through smart city mission, in order to make environmental balance, justice to society, safe and secure life and finally economical development (Gandy & Nemorin, 2020). The Schedule VII of companies act 2013 defines about corporate social responsibility, focus on promotion of education, hunger and poverty eradication, health, women empowerment, employment, social business, contribution to the Prime Minister's National Relief Fund and environmental sustainability. In the same direction, the smart city project aims to provide quality of life, infrastructure development, smart living, smart health, smart education safety and secure, smart travel and smart employment also. At the same time, the economic development assures better standard of living, better of public health system, higher literacy rate, improve the productivity, agricultural development, infrastructure development and safety. When CSR, smart city mission and economic development go in a linear, there will be a multi dimensional relationship between CSR and smart city projects with economic development to make assurance of health facility, nutrition, educational development, water, digital transformation, skill development, sports development and skill development. In all cases of relationship, there will be the creation of employment generation and improve in productivity in an society. (Myeong et al., 2022), (Bondi, 1997) also denoted the gentrification rural to urban leads to conomic expansion. (Organization for Economic Co-operation and Development & Ministry of Land, Insfraestructure and Transport, 2020) is purely focused on the policy setting of Smart City for global business integration to achieve the Economic Growth. ("Smart Cities Constr. Technol.," 2020) has specified the benefits of smat city development as smart growth, rigorous development, smart mobility, smart living smart governance, smart governance and smart economy for economic development and sustainable development. The certain variables are mentioned categorically in Table 3.1 wherein the relationship is viewed.

**Table 3.1 CSR, SMART CITY PROJECTS AND ECONOMIC DEVELOPMENT**

CSR	SMART CITY PROJECTS	ECONOMIC DEVELOPMENT
Promotion of education	Quality of living	Standard of living
hunger and poverty eradication	Infrastructure development	Public health
Health	Smart health	Higher literacy rate
Women empowerment	Smart education	Improve productivity
Employment	Safety and secure	Agricultural development
Social business projects	Digital transformation	Infrastructure development
Contribution to Prime Minister's National Relief Fund	New Business development	Safety
Environmental sustainability	Service oriented	Manufacturing and service

Many project companies are working under "Smart Ccity Project" companies to develop the social infrastructure, to provide environment protection, work on technological infrastructure, to provide safe drinking water, community toilet, clean India mission, recreation facility, promoting smart education and many more. Whereas the "CSR" of smart city project company and companies under smart city project denote better CSR practice, social responsible business, safe drinking water, clean India mission, eradication of extreme hunger and poverty, employment to local people promoting education and CSR campaign. When CSR of smart city mission will be there, definitely there will be some kind

of impact on the “Economic Development (ED)” onto the point of agricultural development, manufacturing industry development, service sector development, employment generation and quality infrastructure development. 20 variables are drawn to study the impact of CSR of smart city projects on economic development, mentained in Table 3.2.

**Table 3.2 CSR of Smart City Projects and Economic Development**

<b>VARIABLES- CSR of Smart City Projects and Economic Development</b>	
1. Social Infrastructure	11. Eradication of extreme hunger and poverty
2. Environment Protection	12. Social Responsible Business
3 Technological Infrastructure	13. Employment to Local People
4. CSR practice	14. Promoting Education
5. Social Responsible Business Development	15. CSR campaign
6. Safe Drinking Water	16 Agri Market development
7. Community Toilet	17. Manufacturing Industry Development
8. Clean India Mission	18. Service Sector Development
9. Health	19. Employment Growth
10. Recreation Infrastrucutre	20. Quality Infrastructure Growth.

When two pillars are taken into the main study such as “CSR of Smart City Projects (CSRSCP)” and “Economic Developmentc (ED)”. From the above literature review, the mentioned variables in the Table 3.2 are studied and included separately as CSRSCP and ED in the Table 3.3. Few common variables are also pertaining to both CSRSCP and ED, which satisfies elements of both Corporate Social Responsibility (CSR) and economic development (ED) of the society.

**Table 3.3 Impact of CSR of Smart City Projects on Economic Development**

<b>CSR of SMART CITY PROJECTS</b>	<b>ECONOMIC DEVELOPMENT</b>
01. Social Infrastructure	18. Service Sector Development
02. Environment Protection	01. Social Infrastructure
11. Eradication of extreme hunger and poverty	02. Environment Protection
04. CSR practice	19. Employment Growth
13. Employment to Local People	13. Employment to Local People
10. Recreation Infrastructure	07. Community Toilet
07. Community Toilet	09. Health
09. Health	08. Clean India Mission
15. CSR campaign	05. Social Responsible Business Development
06. Safe Drinking Water	20 Quality Infrastructure Growth
08. Clean India Mission	14. Promoting Education
14. Promoting Education	03. Technological Infrastructure
03 Technological Infrastructure	12. Social Responsible Business
12. Social Responsible Business	16. Agricultural Market Development

The (1) “Smart city” concept and implementation practice (Vishnivetskaya & Alexandrova, 2019) and (2) Smart cities of the future (Batty et al., 2012), and (3) The Role Corporate Social Responsibility has in the Smart City Project in Spain (López-Arranz, 2017), and (4) economic development (Brekke,

2021) and (5) A Journey from Conventional Cities to Smart Cities (Brekke, 2021) (“Smart Cities Constr. Technol.,” 2020). The methodology which is followed in this study is given by many authors. (Yang & Basile, 2019) has approached to engage the CSR as the strategic approach to Smart City development for sustainability, where the companies are responsible for their activities and their impact on the society. The Connectivity, Sustainability and Resiliency are introduced in implementation of Smart City Project (Suliman et al., n.d.). There is a definite role of CSR in smart city development in order to have social, political and economical advancement in the society (López-Arranz, 2017). Due to smart facilities, new investment will create new employment in the city (Randhawa & Kumar, 2017). The Surat Smart City Development Limited has adopted CSR in the smart city development to provide justice to people and environment of surat at a large extent (Bowman, 1975). The company produced the CSR guidelines and policies for CSR activities in the Surat Smart City, mentioned in the documents of the Surat Smart City in as a Documents SSCDL/SSCDL\_CSR\_Policy.pdf. Now, (Brekke, 2021) has specified about the positive role of education in regional economic development, wherein the high-tech will have greater participation in educational development. The promotion of education is one of the elements of the CSR, which is well defined in Smart City Project as Smart Education and also is an influential factor of the Economic Development. According to (Bonte, 2018), GDP, Public Investment and Urban Economy will grow due to the positive impact of Smart City development by Business Friendly Environment, Innovation and Incubation facility, Skill based Education and Qualitative affordable services.

#### **4 Research Methodology**

More than 75 literatures are studied to understand the concept and benefits of smart city mission, out of which 30 literatures are studies rigorously. Finally 5 literatures are focused to carry on the paper. (1) “Smart city” concept and implementation practice (Vishnivetskaya & Alexandrova, 2019) and (2) Smart cities of the future (Batty et al., 2012), and (3) The Role Corporate Social Responsibility has in the Smart City Project in Spain (López-Arranz, 2017), and (4) economic development (Brekke, 2021) and (5) A Journey from Conventional Cities to Smart Cities (Brekke, 2021) (“Smart Cities Constr. Technol.,” 2020). The methodology which is followed in this study is given as

**Conceptualisation of the Topic: June 2018**

**Literature Review: July 2018**

**Field Survey: Pilot Study: August 2018 to March 2019**

**Questionnaire Administered: May 2019**

**Data Collection: July 2019**

Further Study: Phase 1: upto February 2020, Phase 2: upto March 2022

Quantitative research methodology along with descriptive statistics and regression analysis method are used to study the topic with two objectives.

##### **4.1. Objectives of the study**

Objective 1: To study the CSR activities of SMART CITY project companies.

Objective 2: To examine the impact of CSR of SMART CITY projects on economic development.

#### **4.2. Pilot study**

Minimum eight numbers of people took part in different panel of discussion. Professors, businessman, students, retired central and state Government employees and on the job Government employees were taken part in the panel discussion. Four numbers of panel discussion were happened in different location. In open discussion with the participants from professors of MBA and Engineering colleges, the concern of environment, health, education, transportation, communication and connectivity were the outcome based points from them. Definitely these points are the integral part of CSR practice for any corporate or else for the project companies under the Smart City Project.

#### **4.3. Research questions**

1. Whether the project companies involved in smart city project, practicing CSR locally?
2. Whether the CSR of smart city project companies have any impact on economic development in Odisha.

The first question is taken into consideration to find out, actually, whether the project companies under smart city project are practicing any CSR activities locally or not. Then the second question is related to study the impact of CSR of project companies in economic development, Based on the literature review and pilot study, a self structured questionnaire is designed to study the level of CSR practice and impact of CSR practice on economic development. The responses are proposed by "Please put the value to the question statements as: Very much Likely (5), Likely (4), Neutral (3), Unlikely (2), Very much Unlikely (1)". The questionnaire is formulated in Table 4.questionnaire.

**Table 4 Questionnaire**

<b>Question Number</b>	<b>QUESTION STATEMENTS</b>
1	The social, economical and physical requirements of diversified needs fulfilment are focused under smart city projects.
2	Smart City projects are based on land-use and transportation planning, keeping in the mind to improve the natural environment of the cities.
3	Smart City projects aims to provide smart solutions using modern technology focused on communications, energy and utilities, healthcare, insurance, retail, transportation etc.
4	Whether the project companies under SMART CITY Projects practice CSR in the project ongoing cities?
5	Whether the investors will come to establish their social responsible business due to smart facilities?
6	Safe drinking water is provided by Smart cities projects
7	Community toilet is provided and maintained well by smart cities projects
8	Renovation of water ponds, well and parks are happened in your city
9	Regular health camps and mobile Ambulance services are served in this city.
10	Rest houses for visitors and travellers are provided project companies.
11	Distribution of foods to beggar and wayfarer is done by project companies
12	Project companies are promoting social responsible business projects
13	Project companies are providing employment to local people in their ongoing

	projects.
14	Promoting education about solution of IT, environment and social issues to the people.
15	Whether the project companies are conducting CSR campaign?
16	Vegetable seller will have excellent platform in this city.
17	Manufacturing industries will increase in this city due to smart IT and transportation facilities.
18	Service sector is expected to be increased in this city
19	Due to Smart Solution to the city, employment opportunities will increase.
20	CSR of project companies will create quality infrastructure for growth of business in your city.

#### 4.4 Hypotheses

Based on the research objective 2 and research question 2, hypotheses are determined to test, the impact of CSR of smart city projects on economic development. The hypotheses are such as

H0 : CSR of project companies has insignificant impact on economic development in Odisha.

H1 : CSR of project companies has significant impact on economic development in Odisha.

#### 4.4 Data collection

Primary data were collected randomly from professors of MBA and Engineering colleges in Rourkela Smart City and Bhubaneswar Smart City. 100 Questionnaires were distributed in different colleges and out of which 87 questionnaires were found fully filled up questionnaires from the respondents.

#### 4.5 Sampling

87 Samples were collected randomly from two locations from Odisha i.e. Rourkela Smart City and Bhubaneswar Smart City. Professionals from different departments had given their opinion through the questionnaires, distributed among them. Simple random sampling method is used in this study.

### 5 Data Analysis:

The data analysis is based on the two objectives of the study. The likert scale responses are tabulated in Table 5.1 as per the responses collected from questionnaire. The descriptive statistics in Table 5.2 and level of response towards CSR practice is calculated in Figure 5.1 to justify the objective one. The simple calculation, percentage and average are considered to analyse the objective one. Correlation and regression are used to analyse the impact of CSR of smart city projects on economic development. Null hypothesis is tested through regression, based on p value as the significance. The database is divided into four categories as CSR1(Q1,Q2,Q3,Q4,Q5), CSR2(Q6,Q7,Q8,Q9,Q10), CSR3(Q11,Q12,Q13,Q14,Q15) and ED (Q16,Q17,Q18,Q19,Q20). The CSR1, CSR2 and CSR3 are correlated with ED individually and also regression is calculated individually. After that, all the statements are categorized under CSR activities (CSRSCP) and economic development (ECODEV) according to their nature. Again the independent variable (CSR activities of smart city project companies – CSRSCP) is analysed with dependent variable (Economic Development- ECODEV) to reach to a final decision.

### 5.1 Study of smart city project companies' CSR practice

The analysis of project companies involved in smart city project, practicing CSR locally is identified through 20 random question statements. Although these 20 questions are surrounded by variables of CSR activities, and economic development, few variables are interdependent, which qualifies both CSR activities and economic development as stated in Table 5.1. The responses of respondents are interpreted with likert scale (Very Much Likely (5), Likely (4), Neutral (3), Unlikely (2), Likely (1)). Here TR (Total Responses) and PR (Positive Responses) are calculated for more analysis. Sum of values of 5 and 4 are taken under positive response (PR) for each.

**Table 5.1 Analysis of SMART CITY project companies' CSR practice**

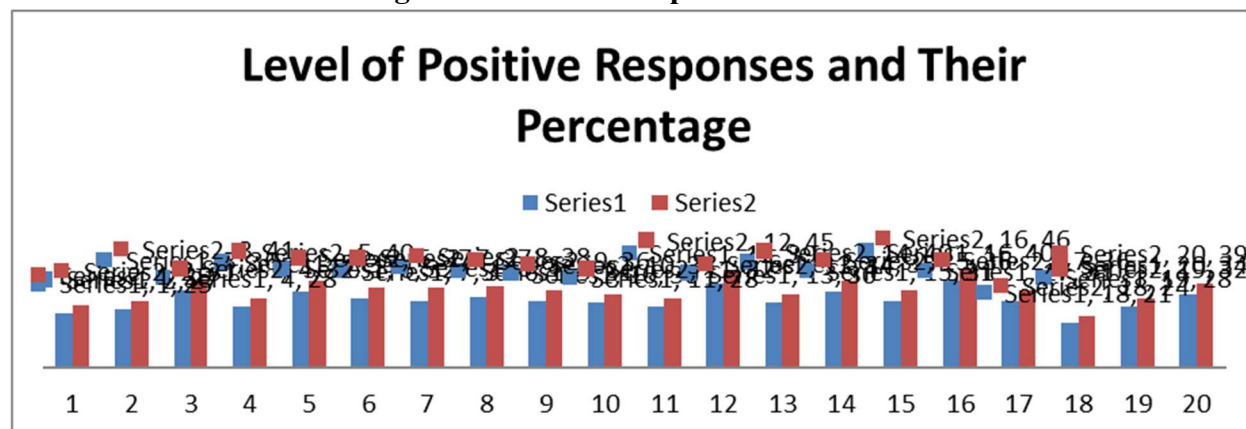
VARIABLES	(5)	(4)	(3)	(2)	(1)	TR	PR
Q1. Social Infrastructure	11	14	26	19	17	87	25
Q2. Environment Protection	12	15	18	23	19	87	27
Q3 Technological Infrastructure	17	19	15	17	19	87	36
Q4. CSR practice	14	14	17	23	19	87	28
Q5. Social Responsible Business Development	18	17	11	24	17	87	35
Q6. Safe Drinking Water	16	16	16	19	20	87	32
Q7. Community Toilet	8	23	24	18	14	87	31
Q8. Clean India Mission	14	19	24	9	21	87	33
Q9. Health	12	19	18	18	20	87	31
Q10. Recreation Infrastructure	15	15	22	17	18	87	30
Q11. Eradication of extreme hunger and poverty	20	8	16	26	17	87	28
Q12. Social Responsible Business	18	21	16	12	20	87	39
Q13. Employment Generation	16	14	16	25	16	87	30
Q14. Promoting Education	19	16	15	21	16	87	35
Q15. CSR campaign	16	15	13	23	20	87	31
Q16 Agri Market development	18	22	7	24	16	87	40
Q17. Manufacturing Industry Development	12	19	19	21	16	87	31
Q18. Service Sector Development	12	9	16	27	23	87	21
Q19. Employment Growth	13	15	22	27	10	87	28
Q20. Quality Infrastructure Growth.	12	22	13	25	15	87	34

**Table 5.2 Positive Response of Respondents**

Variables	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
+ve Response	25	27	36	28	35	32	31	33	31	30
Percentage	29	31	31	32	40	37	37	38	36	34
Variables	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
+ve Response	28	39	30	35	31	40	31	21	28	34
Percentage	32	45	34	40	36	46	36	24	32	39



Figure 5.1 Level of response towards CSR



**Results:** Referring to Table 5.2 and 5.3, Figure 5.1 states that the individual response level and total response level of all questionnaire are below 50 percent i.e. 50% of 87 = 43.5 responses. Total respondents are 87. Here the highest responses is found from Q16 is 40 responses (46%), Q12 (n=39, 45%) which is more than the average response 43.5. The social responsible business (Q12) and Agricultural market development (Q16), both are well practiced by smart city project companies. Both the variables are apart of CSR practice and also economic development. Apart from it, Q3 Technological Infrastructure (41%), Q5 Social Responsible Business Development (40%) and Q14 Promoting Education (40%) respondents have positively responded to the CSR practice and economic development. Whereas the level of CSR of smart city projects are missing in other CSR activities and not satisfactory.

## 5.2 Analysis of Impact of SMART CITY Project Companies' CSR on Economic Development

In this section, all the variables are categorised under two major sub division i.e. CSR of smart city projects (CSRSCP) and Economic Development (ECODEV) to analyse the impact of smartcity project's CSR on economic development. The responses of respondents to all questions are mentioned categorically in Table 5.3 for further analysis.

Table 5.3 SMART CITY projects' CSR and Economic Development

CSR of SMART CITY PROJECTS	Value	ECONOMIC DEVELOPMENT	Value
Q1. Social Infrastructure	25	Q18. Service Sector Development	21
Q2. Environment Protection	27	Q1. Social Infrastructure	25
Q11. Eradication of extreme hunger and poverty	28	Q2. Environment Protection	27
Q4. CSR practice	28	Q19. Employment Growth	28
Q13. Employment to Local People	30	Q13. Employment to Local People	30
Q10. Recreation Infrastructure	30	Q7. Community Toilet	31
Q7. Community Toilet	31	Q9. Health	31
Q9. Health	31	Q8. Clean India Mission	33
Q15. CSR campaign	31	Q5. Social Responsible Business Development	35

Q6. Safe Drinking Water	32	Q.20 Quality Infrastructure Growth	34
Q8. Clean India Mission	33	Q14. Promoting Education	35
Q14. Promoting Education	35	Q3. Technological Infrastructure	36
Q3 Technological Infrastructure	36	Q12. Social Responsible Business	39
Q12. Social Responsible Business	39	Q.16. Agricultural Market Development	40

### 5.3 Examine the relationship between CSR of smart city projects and Economic Development

**Table 5.4 Correlation between CSR and Economic Development**

CSR 1	CSR 2	CSR 3	ED	CSR 1	CSR 2	CSR 3	ED
Q1=25	Q6=32	Q11=28	Q16=40	CSR 1	1		
Q2=27	Q7=31	Q12=39	Q17=31	CSR 2	0.070589	1	
Q3=36	Q8=33	Q13=30	Q18=21	CSR 3	-0.28167	-0.40926	1
Q4=28	Q9=31	Q14=35	Q19=28	ED	<b>-0.59794</b>	<b>-0.42299</b>	<b>-0.22117</b> 1
Q5=35	Q10=30	Q15=31	Q20=34	r1(CSR1,ED)= -0.59, r2(CSR2,ED)= -0.42, r3(CSR3,ED)= -0.22			

The test 1 in Table 5.4 shows the correlation between CSR1 and economical development (ED) is Correlation 1 (“r1”) = -0.59 which is a negative correlation. There is no correlation between CSR 1(Q1. Social Infrastructure, Q2. Environment Protection, Q3 Technological Infrastructure, Q4. CSR practice, and Q5. Social Responsible Business Development) and ED (Q16 Agri Market development, Q17. Manufacturing Industry Development, Q18. Service Sector Development, Q19. Employment Growth and Q20. Quality Infrastructure Growth). The test 2, correlation 2 (“r2”) is also - 0.42, which means there is a negative relationship between CSR 2 (Q6. Safe Drinking Water, Q7. Community Toilet, Q8. Clean India Mission, Q9. Health and Q10. Recreation Infrastrucutre) and ED (Q16 Agri Market development, Q17. Manufacturing Industry Development, Q18. Service Sector Development, Q19. Employment Growth and Q20. Quality Infrastructure Growth). The test 3 shows correlation 3 (“r3”) is -0.22, comparatively less negative relationship between CSR 3 (Q11. Eradication of extreme hunger and poverty, Q12. Social Responsible Business, Q13. Employment Generation, Q14. Promoting Education and Q15. CSR campaign) and ED (Q16 Agri Market development, Q17. Manufacturing Industry Development, Q18. Service Sector Development, Q19. Employment Growth and Q20. Quality Infrastructure Growth). Eventhough the level of CSR activities by smart city projects fails in Table 5.2 and Figure 5.1, whereas the Table 5.4 reveals the relationship between CSR activities of smartcity projects and economic development.

The research is extended to test the hypotheses through the independent variable CSRSCP and dependent variable ECODEV, mentioned in Table 3.2, 3.3 and 5.3.

### 5.4 Hypotheses Testing

CSR of Smart City Project Companies has insignificant impact on Economic Development.

As per the relationship mentioned in Table 5.4 of 5.3, the hypothesis is tested in three category i.e. 1. CSR1 to ED, 2. CSR2 to ED and 3.CSR3 to ED.

#### 1. CSR 1 to ED

**Table 5.5 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	56.415	20.038		2.815	.067
CSR1	-.848	.656	-.598	-1.292	.287

a. Dependent Variable: ED

## 2. CSR 2 to ED

**Table 5.6 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	112.923	101.624		1.111	.348
CSR2	-2.615	3.235	-.423	-.809	.478

a. Dependent Variable: ED

## 3. CSR 3 to ED

**Table 5.7 Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	42.370	29.669		1.428	.249
CSR3	-.355	.904	-.221	-.393	.721

a. Dependent Variable: ED

In above three cases, the significant values, a. 0.28, b. 0.47 and 0.72 are more than P value 0.05, which shows that the H0 are accepted in all three cases. Here CSR of Smart City Project Companies has insignificant impact on Economic Development. The Beta values are 1. -.598, 2. -.423, and 3. -.221 as as same as mentioned in Table 5.4 and Table 5.8 respectively.

**Table 5.8 Correlations**

**Table 5.8 Correlations**

		CSR1	CSR2	CSR3	ED
CSR1	Pearson Correlation	1	.071	-.282	-.598
	Sig. (1-tailed)		.455	.323	.143
	N	5	5	5	5
CSR2	Pearson Correlation	.071	1	-.409	-.423
	Sig. (1-tailed)	.455		.247	.239
	N	5	5	5	5
CSR3	Pearson Correlation	-.282	-.409	1	-.221
	Sig. (1-tailed)	.323	.247		.360
	N	5	5	5	5
ED	Pearson Correlation	-.598	-.423	-.221	1
	Sig. (1-tailed)	.143	.239	.360	
	N	5	5	5	5

## 5.5 Hypotheses Testing- Regression Analysis

### 4. CSRSCP to ECODEV

The variables from 20 question statements are again categorised under (CSRSCP) and (ECODEV) according to individual nature of the variables and their interdependence. The variables which has dual influence, taken into both the category. Finally 14 variables are included in CSRSCP and 14 variables are included in ECODEV, mentioned in Table 3.2, 3.3 and 5.3. all the variables are subdivided into two categories to have a single hypotheses test i.e. (CSRSCP) to (ECODEV).

### Hypothesis:

H0 : CSR of Smart City Project Companies has insignificant impact on Economic Development.

H1: CSR of Smart City Project Companies has significant impact on Economic Development.

**Table 5.9 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.956 <sup>a</sup>	.915	.908	1.61889

a. Predictors: (Constant), CSRSCP

**Table 5.10 ANOVA<sup>b</sup>**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	336.907	1	336.907	128.551	.000 <sup>a</sup>
	Residual	31.450	12	2.621		
	Total	368.357	13			

a. Predictors: (Constant), CSRSCP

b. Dependent Variable: ECODEV

**Table 5.11 Coefficients<sup>a</sup>**

**Table 5.9 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.956 <sup>a</sup>	.915	.908	1.61889		
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	-10.619	3.765		-2.821	.015
	CSRSCP	1.362	.120	.956	11.338	.000

a. Dependent Variable: ECODEV

In model summary Table 5., the R is 0.956a, R<sup>2</sup> is 0.915 and adjusted R<sup>2</sup> is 0.908. The significant value in Anova Table 5.10 is 0.000a. The coefficient Table 5.11 shows the significant value is 0.000, which is less than P value 0.05. H<sub>0</sub> is rejected here to satisfy the statement that “H<sub>1</sub>: CSR of Smart City Project Companies has significant impact on Economic Development”. Beta = 0.956 satisfies a strong correlation between CSR of smart city projects (CSRSCP) and economic development (ED). Sig.=0.000 signifies affirmative impact of CSR on Economic Development.

## 6. Findings, Suggestions and Conclusion

The results are found from analysis CSR1, analysis CSR2 and analysis CSR3 is measurably failed and states that there is no significance impact of CSR of project companies under smart city mission on economic development in Odisha.

### 6.1 Findings

Irrespective of major result of last three analyses CSR1-ED, CSR2-ED and CSR3-ED, the final result of analysis 4 states that correlation between CSRSCP and ECODEV is verymuch strong and influences each other strongly. The findings are pointing to

1. There is a slight connection of CSR activities with Smart City Project Activities include the health, education, social welfare, women empowerment, social responsible business and employment generation etc.
2. The positive impact of CSR of Smart City Project Companies on Economic Development in Odisha is found. The technology, model structure and their maintenance will provide growth to the employment, service sector, peripheral agriculture, health, education, market and moreover to the manufacuting in near future.

### 6.2 Suggestions

The project companies should work ethically to implement the CSR projects in the periphery area of development area, which are missing in present scenario of smart city projects. Development should not be in the lence of possibility of revenue generation from public, households, business houses, small traders by Government, but by providing services to the people. The development should allow the philanthropic corporare social responsibility by the smart city project in the society through CSR fund

of smart city project.

### **6.3 Conclusion**

The CSR focused projects will have positive impact on the overall development in Odisha. The business opportunities in smart cities will ultimately create a positive environment for uplifting employment, agricultural development and entrepreneurship and start-ups in the smart cities as well as sub urban area. Even though the impact of CSR of projects on economic development is insignificant, but the rapid CSR activities of project companies will influence the economic development parameters positively in near future.

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