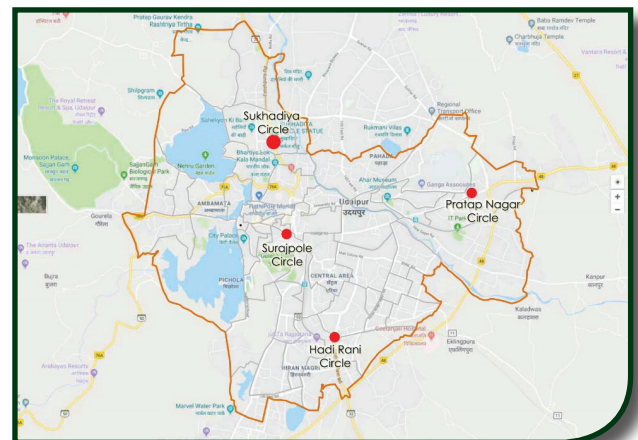




QUICK WIN PROJECT – UDAIPUR AMBIENT AIR QUALITY MONITORING STATION (AAQMS)

About Udaipur

Udaipur is the sixth largest city in Rajasthan with a population of 4.51 lakhs (Census 2011). The city has an area of 64 sq km under municipal jurisdiction and acts as an industrial, administrative, and educational center of the region. It is also an important tourist destination for national as well as international travelers. The city is relatively compact with a dense road network, but is gradually growing in all directions through lower-density development. The city core is the hub of commercial activities, whereas the eastern part of the city is well known for industrial establishments.



CapaCITIES Project

Cities account for approximately two-thirds of global energy use and over 70 percent of energy-related greenhouse gas (GHG) emissions that drive global climate change. In India, increased demand for energy, infrastructure and services is putting city systems under pressure. This will be accentuated further by growing risks caused by climate variability. Poor and vulnerable segments of the city populations will be affected most. Through the Capacity Building for Low Carbon and Climate Resilient City Development project (CapaCITIES), SDC's Global Programme Climate Change will support and accelerate the Government of India's efforts for sustainable urbanization.

on improving air quality in the City, the CapaCITIES project is installing four sensor based ambient air quality monitoring stations in Udaipur at the following locations:

- Sukhadiya Circle (North)
- Surajpole Junction (Center and West)
- Pratap Nagar Circle (East)
- Hadi Rani Circle (South)

A digital display board that would continuously report data from all the 4 sensors has been installed at the administrative building of the Udaipur Municipal Corporation (UMC). The data generated and analyzed by these sensors can be seen on UMC's website also.

Sensor based AAQMS

Udaipur is a rapidly growing city of southern Rajasthan. Number of private & public vehicles and construction activities are also increasing with this growing population which caused vehicular congestion and direct pollution.

Consequently, air pollution is become a new challenge for the city which is affecting health of citizens and increasing respiratory diseases. City is not having adequate number of sensors to monitor citywide air quality. Therefore, given the need for better transport and traffic planning in the City and its potential impacts





GHG Emission Reduction / Adaptation Impact

Data generated by these sensors helped UMC to prepare Action plan for Udaipur, under National Clean Air Programme (NCAP) initiated by the Ministry of Environment (MoEF), Govt. of India.

This information can also be used to make knowledgeable decisions about traffic and transport planning in the city. This planning will help to reduce the GHG emissions. More importantly, the data can be interpreted to assess the impacts of observed air pollution levels on the health of citizens and mitigative measures can be appropriately proposed.



Project Impact

Training has been provided to the city government on analyzing the air quality data generated by these monitoring stations, giving them the ability to periodically monitor air quality and take timely remedial actions if required. City-wide initiatives with the aim of improving traffic management and efficacy of public transport can significantly improve air quality. The periodic monitoring of air quality also enables the city to implement a public warning system for potential health hazards, based on the prevalent Air Quality Index.

Beneficiaries

Project beneficiaries include UMC, Health Department and citizens of the Udaipur.

Potential for Replication

The pilot project can be scaled up with installation of more machines and data from all stations can be integrated on a single server.

Project Investment

The total project investment was CHF 7'906

For more information, please contact:

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