Assessment / Evaluation Report on Major Research Project Sponsored by University Grants Commission Bahadurshah Safar Marg New Delhi

A. Details of Project

Title of the project Assessment of Urban Sprawl and its impact on

the Environment in Puducherry using

Geomatics 04 Years

Total duration of Project

Project Status

Subject:

File Number (Ref. No)

Grants approved

: Completed

Environmental Sciences

42-417/2013(SR), dt. 23.03.2013

Rs.10,33,800/-

B. Evaluation Report of Expert Member

1. Name of Principal Investigator

2. Designation

3. Address of Principal Investigator

Dr. S. Jayakumar Associate Professor

Dept. of Ecology & Environmental Sciences

School of Life Sciences Pondicherry University

Kalapet, Puducherry - 605 014

4. Whether work is focused on the

title of the sanctioned project

Yes

5. Whether original work is done

Yes

6. Whether significant contribution made by the Principal Investigator

Yes

7. Whether proposed work have relevance to the society/scientific community

Yes

8. What type of contribution found in the final report: Theoritical/Practical. If there are theoretical contributions given by the principal investigator whether real applications are given

Theoritical

Dr. S. JAYAKUMAR DEPT OF ECOLOGY & ENVIRONMENTAL SCIENCES SCHOOL OF LIFE SCIENCES Pondicherry University, Puducherry-605 014. India. Whether theoretical contributions and Their results and finds are published

Not known

Whether results and findings are Significant

: Yes

 Whether the significant publications are made by principal investigator in peer reviewed journals

: Not known

 The number of publications made By the principal investigator in Standard reputed journal Not known

 Whether contributions made by Principal investigator is sufficient

: Yes

14. The findings and results of the Sanction major research project are Justifiable

Yes

15. Whether completed project work Meet the proposed objectives

Yes

16. Give your brief comments on the Overall work of the project

The Puducherry district is a fast growing one and the study on unplanned growth of urban areas based on land use pattern and correlating environmental quality will help the local administration to regulate the unauthorized growth/development of settlements and better administration by providing safe living condition in future.

17. Any specific comments

: --

 Indicate your overall assessment of The project: Poor/Good/Excellent

Good

Date: 30.08.2018 Place: Tiruchirappalli

Name & Address of Expert:

Dr.Ramaswamy Babu Rajendran
Professor and Head
Department of Environmental Biotechnology
Chair, School of Environmental Sciences
Bharathidasan University, Tiruchirappalli-620024
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Dr. S. JAYAKUMAR

Professor
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SCHOOL OF LIFE SCIENCES
Pondicherry University, Puducherry-605 014. India.

Assessment / Evaluation Report on Major Research Project Sponsored by University Grants Commission Bahadurshah Safar Marg New Delhi

A. Details of Project

Title of the project : Assessment of Urban Sprawl and its impact on the

Environment in Puducherry using Geomatics

Total duration of Project : 04 Years
Project Status : Completed

Subject: Environmental Sciences

File Number (Ref. No) : 42-417/2013(SR), Dt. 23.03.2013

Grants approved : Rs.10,33,800/-

B. Evaluation Report of Expert Member

Name of Principal Investigator
 Designation
 Dr. S. Jayakumar
 Associate Professor

3. Address of Principal Investigator : Dept. of Ecology & Environmental Sciences

School of Life Sciences Pondicherry University

Kalapet, Puducherry – 605 014

4. Whether work is focused on the title of the sanctioned project : Yes. The work is focused on the title sanctioned

project.

5. Whether original work is done : Yes. The work reported in this project is original.

6. Whether significant contribution made by the Principal Investigator : Yes. The Principals Investigator has made

7. Whether proposed work have relevance

to the society/scientific community : Yes. The proposed work is highly relevant to the society and scientific community.

8. What type of contribution found in the final report: Theoretical/Practical. If there are theoretical contributions given by the principal investigator whether real applications are given

9. Whether theoretical contributions and Their results and finds are published :

10. Whether results and findings are
Significant: The outcomes of this project are significant.

Dr. S. JAYAKUMAR

Professor

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SCHOOL OF LIFE SCIENCES
Pondicherry University, Puducherry-605 014. India.

- 11. Whether the significant publications are made by principal investigator in peer reviewed journals
- : No details are given in the report. The results of this project can be published in peer reviewed journals.
- The number of publications made By the principal investigator in Standard reputed journal
- : No details are given in the report.
- Whether contributions made by Principal investigator is sufficient

: Sufficient.

14. The findings and results of the Sanction major research project are Justifiable : Yes. Justifiable.

15. Whether completed project work Meet the proposed objectives

: Yes. The outcomes of the project work met the proposed objectives of the project

Give your brief comments on the Overall work of the project

As urban sprawl causes significant changes in land use, air, water, and soil pollution, monitoring of urban environmental quality is necessary. In this context, the PI has investigated the urban growth, land use dynamics using remote sensing and GIS methods, assed the ground water quality and environmental quality, analyzed the population growth and urban sprawl dynamics in Puducherry district since 1988. PI has also done modelling study on the suitability of land for urban growth. This investigation reports the levels of water quality parameters that exceed or within the limit, and water quality variation before and after the monsoon period. The findings indicate that the overall ground water quality and environmental quality is fair in the chosen study areas. The investigation also suggests that open drainage, greeneries, wetlands, and transport facilities need to be improved along with urban sprawl. The data reported in this report can be used for future reference data in the urban quality monitoring study in Puducherry.

17. Any specific comments:

As regular monitoring is necessary to maintain good public health in growing urban areas, the data reported in this project form base for future investigations. In addition to water quality and public survey on for environmental quality instigation, in future studies, urban sprawl and assessment of air pollutants and their impacts on public health would be more advantages to society.

18. Indicate your overall assessment of The project: Poor/Good/Excellent

: Excellent

Date: 18-06-2018 Place: Salem

Name & Address of Expert: Dr. Kumarasamy Murugesan, Professor & Head, Department of

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