Pune District Education Association's

Annasaheb Magar Mahavidyalaya

Hadapsar, Pune -28

Scientific Approach for Rural Development

"NATIONAL SERVICE SCHEME"

Special Camp

At Post Ketkawale, Tal. Purandar, Dist. Pune

1st to 7th January 2023

Editor

Prin. Dr. Nitin L. Ghorpade

(Principal)

Annasaheb Magar Mahavidyalaya, Hadapsar, Pune -28

Executive Editor

Dr. Savita Kulkarni

(District Co-ordinator)

National Service Scheme

Savitribai Phule Pune University

Editorial Board

Prof. Gaurav Shelar **Dr. Anju Mundhe**

Prof. Nitin Lagad

N.S.S. Program Officers

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Prin. Dr. Nitin L. Ghorpade

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Annasaheb Magar Mahavidyalaya
Hadapsar, Pune. 411 028, Maharashtra, India
Contact No.: 020-26990376
Email: plasma_amm@yahoo.co.in
Website: www.pdeaamcollege.edu.in

सत्यमेव जयते

अजित पवार

विरोधी पक्षनेता, महाराष्ट्र विधानसभा

दि. १७ एप्रिल २०२३.

शुभेच्छा

पुणे शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्यावतीने राष्ट्रीय सेवा योजना विशेष शिबीर पुस्तिकेची निर्मिती करण्यात येणार असल्याचे समजून आनंद झाला.

विद्यार्थ्यांच्या सर्वांगिण विकासात राष्ट्रीय सेवा योजना शिबीरांचे अनन्य साधारण महत्व आहे. या शिबीरात राबविण्यात येणाऱ्या विविध उपक्रमांच्या माध्यमातून विद्यार्थ्यांची क्षमता वृध्दी होते, त्यांना स्वतःची ओळख होते, त्यांना परिसरासह समाजाचे ज्ञान होते. विद्यार्थ्यांना परिसरातील समस्यांचे आकलन होते, ते सोडविण्याचे भान त्यांच्यात निर्माण होते. या सर्व प्रक्रीयेत त्यांच्यात नेतृत्वगुण विकसीत होतात.

अण्णासाहेब मगर महाविद्यालयाव्यावतीने केतकावळे (ता. पुरंदर) येथे आयोजित करण्यात आलेल्या शिबीराच्या माध्यमातून विद्यार्थ्यांनी गावातील पाणी, माती, प्राणी, ऊर्जा, वनस्पती, पीकांसह सर्व घटकांचा सखोल अभ्यास केला. या अभ्यासाचे विश्लेषण तसेच शिबीरात राबविण्यात आलेल्या विविध उपक्रमांची माहिती पुस्तिकेच्या रुपाने प्रकाशित करण्याचा उपक्रम स्तुत्य आहे. विद्यार्थ्यांनी अभ्यास व निरिक्षणाच्या माध्यमातून संकलीत केलेल्या माहितीचा उपयोग केतकावळे गावाच्या विकासाच्या नियोजनासाठी निश्चितच होईल. हा उपक्रम यशस्वीपणे राबविण्यासाठी मार्गदर्शन करणाऱ्या सर्व शिक्षकांचे, या उपक्रमात सहभागी झालेल्या सर्व विद्यार्थ्यांचे अभिनंदन. राष्ट्रीय सेवा योजना विशेष शिबीराच्या या उपक्रमासह प्रकाशित होणाऱ्या पुस्तिकेला मनःपूर्वक शुभेच्छा !

(अजित पवार)

प्रति,
डॉ. नितीन घोरपडे,
प्राचार्य, अण्णासाहेब मगर महाविद्यालय, हडपसर, पुणे.

भारत सरकार
युवा कार्य एवं खेल मंत्रालय
रा.स.यो. क्षेत्रिय निदेशालय, पुणे
(महाराष्ट्र एवं गोवा)

सत्यमेव जयते

Government of India
Ministry of Youth Affairs & Sports
Regional Directorate of NSS, Pune
(Maharashtra & Goa)

28th April, 2023

MESSAGE

I am very much pleased with the activities carried out by Annasaheb Magar College, Hadapsar under National Service Scheme and happy to be part of the book on Scientific Approach for Rural Development.

National Service Scheme has great history and it has proved its importance in Student's development in Higher Education. The overall aim of National Service Scheme is to give an extension dimension to the higher education system and orient youth to community service while studying in educational institution. The activities carried out under the scheme helps to change the volunteers and learn the things need in the future. It works in the aim to understand the community, understand themselves in relation to community, identify needs and problems of the community and involve in problem solving process. The organization of activities gives skills, develop competence, develop capacity and acquire leadership qualities. With the objectives of NSS college has organized the survey in the village Ketkavale, resources are mobilized and the results are put in the form of book. I would like to appreciate the efforts taken by committee members to fulfil and complete it successfully.

Savitribai Phule Pune University is one of the premier Universities in India. National Service Scheme of Savitribai Phule Pune University has great history. The student enrollment in NSS is high in the colleges affiliated to the University in Maharashtra. In 2007 the program Samarth Bharat Abhiyan is pioneered under the guidance of then Vice Chancellor Dr. Narendra Jadhav. Activities related to rural development and role of student in rural development are organized under the Campaign. Fascinated with the activity Dr. Nitin Ghorpade worked lot under the campaign, published books in various colleges wherever he went. Under his guidance 17 books with the data of 17 villages prepared and published. It is great pleasure that Annasheb Magar College continues this legacy and prepared overall data of the village Ketkavale.

The book contains 16 articles regarding the survey and its analysis and result. Special camp report is added to the book. The photographs show the gravity and variety of the activities carried out in the camp. I am very happy that demanding subject like Electoral Literacy, Water conservation, Health awareness, Leadership development are discussed and work out through the activities.

The efforts taken by the Principal Dr. Nitin Ghropade to motivate his teachers, staff and NSS volunteers in successful organization of the camp is appreciated. I convey my best wishes on behalf of Regional Directorate of NSS, Pune to Dr. Savita Kulkarni District Co-Ordinator, NSS Savitribai Phule Pune University, NSS Program Officers Prof. Nitin Lagad, Dr. Anju Mundhe, Prof. Gaurav Shelar, supporting staff and all the NSS Volunteers who involved in the activities and take efforts in making the Camp successful.

REGIONAL DIRECTORATE OF NSS ★ PUNE ★

D. CARTHIGUEANE
Regional Director-NSS

'अे' होस्टेल ब्लॉक, कृषि महाविद्यालय परिसर, शिवाजीनगर, पुणे ४११००५. 'A' Hostel Block, College of Agriculture Campus, Shivajinagar, Pune 411005.
Telefax : 020 - 2553 3401 ✦ E mail : nssrcpune@gmail.com

EDITORIAL

I am very glad to release a book on Scientific Approach for Rural Development comprising activities organized in the Special Camp at Ketkavale Tal Purandar, Dist. Pune. I have immense pleasure that Hon. Ajitdada Pawar has given the message for the book.

National Service Scheme is extension activity in higher education and work with the moto of education through community service and community service through education. It is scheme, aim for the personality development of the volunteer and linkages between the campus to community. Today India has high population of youth and it is necessary to provide the knowledge, career opportunities as well as meaning and direction to live healthy life.

India has a large population living in Rural areas. Quality of life, infrastructure, facilities, economic and social wellbeing is base for the development in rural areas. Rural areas are undergoing rapid transformations caused by social and economic policies, globalization and climatic and environmental change. To study the problems faced by rural areas research is necessary. Surveys are incredibly valuable methods of research that allow to transform feedback into data. To understand the needs and problems of the community and involve the students in problem solving process we we organized special camp at Ketkawale Tal. Purandar during 1st to 7th Jan 2023. Activities related to personality development of the volunteers and connection with the villagers are organized during the period of camp.

College best practices has weightage in Higher education institution accreditation. The best practice is able to instill the scientific approach to issues of problems of society. With the importance of activity Scientific Survey of the nearby villages is taken as best practice for our college.

The survey organized in the village during the camp at village Ketkawale. The faculty members from zoology, Botany, Chemistry, Physics, Environmental Science, Geography, Psychology, Economics, Marathi B.Voc (Tourism and service Industry), Politics, Commerce with their students came together for data collection in their respected subject.

Environmental as well as social awareness was the moto of the camp. Theme for the special camp was Electoral Literacy. As per the theme Awareness Rally, Poster competition and exhibition, Essay competition, Street play on Electoral Literacy are organized in the camp. During the camp Continuous Contour Trenches, Lectures, Karate training for the girls in school at Ketkawale, Value Education, Leadership development workshop were the programmes organized in the camp.

I am very thankful to Vice Chancellor Savitribai Phule Pune University Dr. Karbhari Kale, NSS Director Dr. Prabhakar Desai for the opportunity to organize the special camp. I would like to thank the dignitaries who deliver the lectures and shared their views to create the awareness in students and villagers.

I specially thanks to Mr. Yashwant Shitole, Mr. Shrikant Laxmishankar, Mrs. Amruta Deshpande, Ms. Uma kale, Swami Vivekanand Kendra for their special guidance to the students.

I would like to be very thankful to Hon. Ajitdada Pawar, President, Pune District Education Association for his strong support for the upgradation of higher education and facilitate the students with amenities and facilities. I am also very thankful to Hon. Sandeep Kadam, Hon. Secretary and Hon. Mr. Rajendra Ghadge, Vice President PDEA for their guidance and support. I would like to thank, Hon. Mohanrao Deshmukh, Treasurer PDEA Mr. L.M. Pawar, Join Secretary for their support and presence in the camp.

I would like to thank Shri. Maruti Bhadale, Sarpanch, Shri. Anand Gore, Shri. Satish Bathe, Shri Ashok Bhagat, Shri Harshal Jagdale and all the villagers who actively support and participated in the activities carried by us.

I appreciate the efforts taken by Dr. Savita Kulkarni, Prof. Nitin Lagad, Dr. Anju Mundhe, Prof. Gaurav Shelar, Dr. G.D. Awate, Dr. Vandana Sonvale and their members for organizing camp successfully.

Prin. Dr. Nitin Ghorpade

(Principal)

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राष्ट्रीय सेवा योजना विशेष शिबीर

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प्रा. डॉ. नितीन घोरपडे

उद्घाटन समारंभ :

पुणे जिल्हा शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेचे विशेष शिबीर मु. पो केतकावळे, ता. पुरंदर जि. पुणे या ठिकाणी दि. १ जानेवारी ते ७ जानेवारी २०२३ या कालावधीत आयोजित करण्यात आले होते. या शिबीराचा उद्घाटन समारंभ दि. १ जानेवारी २०२३ रोजी आयोजित करण्यात आला. या उद्घाटन समारंभासाठी पुणे जिल्हा शिक्षण मंडळाचे उपसचिव मा. श्री. एल. एम. पवार, महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे, सरपंच श्री. मारूती भडाळे, कार्यक्रम अधिकारी डॉ. सविता कुलकर्णी, प्रा. नितीन लगड, डॉ. अंजू मुंढे, प्रा. गौरव शेलार उपस्थित होते.

कार्यक्रमाची सुरूवात उद्घाटनाने झाली. श्रमदानाच्या साहित्याच्या पूजनाने शिबीराचे उद्घाटन करण्यात आले. कार्यक्रमाचे प्रास्ताविक करताना डॉ. सविता कुलकर्णी यांनी राष्ट्रीय सेवा योजनेची माहिती सांगून विशेष शिबीरामध्ये विविध उपक्रम आयोजित केल्याचे सांगितले.

सरपंच श्री. मारूती भडाळे यांनी शिबीरातील सर्व विद्यार्थी आणि शिक्षक यांचे स्वागत केले. शिबीरातील आयोजित उपक्रमांचे त्यांनी कौतुक केले आणि या सर्वाला गावचे सहकार्य लाभेल असे त्यांनी सांगितले. महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांनी विद्यार्थ्यांशी संवाद साधताना अशा शिबीरांमध्ये सहभागी झाल्याने विद्यार्थ्यांचा आत्मविश्वास वाढतो, विविध प्रकारच्या संधी प्राप्त होतात आणि नवनवीन गोष्टी शिकायला मिळतात त्यामुळे विद्यार्थ्यांनी अशा शिबीरामध्ये सहभागी व्हावे असे सांगितले.

कार्यक्रमाचे अध्यक्ष मा. श्री. एल. एम. पवार यांनी विद्यार्थ्यांचे कौतुक केले. आणि शिबीरात सहभागी होणारे विद्यार्थी वेगळे असून या निमित्ताने अनेक गोष्टी शिकायला मिळतात आणि ते अनुभवाने समृध्द होतात. विविध अनुभव सांगून त्यांनी अशा उपक्रमांचे विद्यार्थ्यांच्या आयुष्यातील महत्त्व सांगितले आणि सर्वांना या शिबीरासाठी शुभेच्छा दिल्या. कार्यक्रमाचे सूत्रसंचालन प्रा. नितीन लगड यांनी तर आभारप्रदर्शन प्रा. गौरव शेलार यांनी मानले.

सर्वेक्षण :

महाविद्यालयातील शिक्षकांच्या मार्गदर्शनाखाली माती,प्राणी, पाणी, वनस्पती, पर्यावरण, पर्यटन, शेती यांचा तसेच आर्थिक सामाजिक भौगोलिक सर्वेक्षण करण्यात आले. रसायनशास्त्र, सूक्ष्मजीवशास्त्र विषयाच्या विद्यार्थ्यांनी गावातील विहिरीचे, कॅनॉलचे पाणी तसेच शेतातील मातीचे नमुने घेतले. भूगोल विभागाच्या विद्यार्थ्यांनी गावातील भौगोलिक परिस्थिती, शेतामध्ये असणारी पिके, तेथे असणारा मातीचा प्रकार याचा अभ्यास केला. भौतिकशास्त्र विषयाच्या विद्याथ्र्यांनी गावामध्ये वापरल्या जाणाऱ्या उर्जास्त्रोतांचा अभ्यास केला.

प्राणिशास्त्र विभागाच्या विद्यार्थ्यांनी गावातील पक्षी, प्राणी, किटक आणि तेथील भौगोलिक परिस्थिती याचा अभ्यास केला. वनस्पतीशास्त्र विभागाच्या विद्यार्थ्यांनी गावातील औषधी वनस्पती, तेथील शेती पध्दती, पिकांचा प्रकार, जैवविविधता या विषयाचा अभ्यास केला. पर्यटन विषयाच्या विद्यार्थ्यांनी बालाजी या पर्यटन स्थळाचा तेथील परिस्थितीवर होणारा अभ्यासला. अर्थशास्त्र विषयाच्या विद्यार्थ्यांनी गावातील शेतीक्षेत्रावर हवामानबदलाचा परिणाम अभ्यासला. मानसशास्त्र विषयाच्या विद्याथ्र्यांनी गावातील शाळेतील दहावीच्या विद्यार्थ्यांची कलचाचणी घेतली. मराठी विभागाच्या वतीने गावतील बोली भाषा, बोलण्यात येणारे इतर शब्द, ओव्या, म्हणी, गाणी यांची माहिती घेण्यात आली. गावामधील अंगणवाडीतील मुलांच्या दात आणि डोळयांची तपासणी करण्यात आली. यासाठी प्रा. शितल जगताप, स्नेहल शिपलकर, प्रा. तन्वी खरे, प्रा. अंजली कामशेट्टी, डॉ. शुभांगी शिंदे, प्रा. उर्मिला धनगर, प्रा. शितल गायकवाड, प्रा. शिल्पी दासगुप्ता, डॉ. अंजू मुंढे, डॉ. वंदना सोनवले, प्रा. भावना जगताप, प्रा. शितल आर. गायकवाड, प्रा. प्रविण पोतदार, प्रा. प्रज्ञा खरात, प्रा. संगिता देवकर यांनी विद्यार्थ्यांना मार्गदर्शन केले.

स्पर्धा :

शिबिरकालात विद्यार्थ्यांच्या खालील स्पर्धा आयोजित करण्यात आल्या. उत्स्फुर्त नाटय स्पर्धा, देशभक्तीपर समुहगीत स्पर्धा, प्रसंगनाटय या विषयावरील स्पर्धा, जाहिरात स्पर्धा, पाककला स्पर्धा

श्रमदान :

शाळेच्या परिसरातील गवत काढले. कचरा गोळा केला. गावातील रस्त्यांची स्वच्छता करण्यात आली. झाडांना रंग लावला तर शाळेचा परिसर स्वच्छ केला. शाळेच्या मैदानावर वाढलेले गवत काढले. शाळेसमोरील मैदान स्वच्छ केले. तसेच मैदानाचे सपाटीकरण केले. विद्यार्थ्यांनी केतकावळे गावामागील डोंगरावर पाणी अडविण्यासाठी आणि जिरविण्यासाठी चर खोदले. तसेच प्राणी आणि पक्ष्यांना पाणी पिण्यासाठी लहान लहान तळी करण्यात आली.

व्याख्यान :

श्री. श्रीकांत लक्ष्मीशंकर – विवाहपूर्वसमुपदेशन

या कार्यशाळेमध्ये श्री. श्रीकांत लक्ष्मी शंकर (सामाजिक कार्यकर्ते) यांनी विवाहपूर्व समुपदेशन या विषयावर विद्यार्थ्यांना मार्गदर्शन केले, यामध्ये त्यांनी विद्यार्थ्यांनी महाविद्यालयीन विद्यार्थ्यांनी लग्नाचा विचार करताना केवळ आकर्षणावर भर न देता, आपल्या आयुष्यभराचा जोडीदार हा खऱ्या अर्थाने योग्य आहे ना याची खात्री करूनच कोणाशी लग्न करायचे याचा विचार करावा. भविष्यामध्ये जेव्हा लग्नाचा विचार कराल त्यावेळेस सामाजिक, कौटुंबिक आणि आर्थिक जबाबदारी आपल्यावर येणार आहे, या सर्व जबाबदाऱ्या पेलण्यास आपण सक्षम आहोत का याचा विचार करून लग्न करावे, अशा वेगवेगळ्या मुद्यांवर विद्यार्थ्यांना माहिती सांगून विद्यार्थ्यांना भविष्यात वेगवेगळ्या आव्हानांबद्दलही जागृत केले.

ॲ. अमृता देशपांडे – महिला सबलीकरण

महिला सबलीकरण या विषयावर बोलताना अमृता देशपांडे यांनी विद्यार्थ्यांना स्त्री–सबलीकरण म्हणजे स्त्रिया आणि पुरुष यांना प्रत्येक क्षेत्रांमध्ये समान संधी मिळणे होय. स्त्री– सबलीकरण म्हणजे विचारांमध्ये वागण्या बोलण्यामध्ये ते सबलीकरण दिसायला पाहिजे. आधुनिकीकरणामुळे वाढती व्यसनाधीनता, फॅशन, पेहराव अशा बाबतीमध्ये बदल होणे म्हणजे सबलीकरण नव्हे हेही त्यांनी दैनंदिन जीवनातील अनेक उदाहरणांमधून पटवून दिले. स्त्रियांच्या रक्षणासाठी असणाऱ्या अनेक कायद्यांची माहितीही त्यांनी दिली. समाजामध्ये चुकीचे वर्तन करणाऱ्या मुलांना घरातून जर जाब विचारला गेला तर अशी मुले बाहेर मुलींना त्रास देणार नाहीत, त्यामुळे मुलींना देखील विकासाच्या समान संधी घेता येणे शक्य होईल, याविषयी माहिती सांगून स्त्री सबलीकरण ही आजच्या काळाची गरज आहे असे मत त्यांनी व्यक्त केले.

स्वसंरक्षण कार्यशाळा :

यामध्ये उमा काळे व त्यांच्या दोन सहकारी यांनी विद्यार्थिनींना कराटेच्या काही स्टेप दाखवून त्यांच्याकडून करवून घेतल्या. आपल्याकडे असणाऱ्या वस्तू ओढणी, बॅग, क्लिप, पेन याचा वापर करून आपण स्वतःचे संरक्षण कसे करायचे याचे प्रात्यक्षिक देण्यात आले. सुरवातीला बोलताना उमा काळे यांनी विद्यार्थिनींना रस्त्यावर जाताना, प्रवास करताना ॲलर्ट असले पाहिजे असे सांगितले. तसेच आपल्याबाबत अशी काही घटना घडते आहे असे वाटल्यास त्याला पहिल्यांदाच प्रतिकार करावा म्हणजे पुढच्या गोष्टी कमी होतात असे सांगितले. बऱ्याचदा मुली घाबरतात आणि म्हणून समोरचा जास्त प्रबळ होतो असे त्यांनी यावेळी सांगितले.

नेतृत्वगुण आणि मूल्यशिक्षण कार्यशाळा:

या कार्यशाळेसाठी तज्ज्ञ् मार्गदर्शक म्हणून स्वामी विवेकानंद केंद्राचे अरूणा मराठे, सौ. अस्मिता करमरकर, श्री. अविनाश गोखले, श्री. जयदेव म्हमाणे, श्री. प्रशांत सावंत, श्री. रोहित कुलकर्णी, श्री. राहूल भालेकर उपस्थित होते. सुरवातीला स्वामी विवेकांनद केंद्राचे गीत सादर करण्यात आले. त्यानंतर सौ. अरूणा मराठे यांनी स्वामी विवेकांनद आणि त्यांच्या केंद्राची माहिती दिली. तरूणांनी सक्षम व्हावे, विकसित व्हावे यासाठी हे केंद्र काम करत असल्याचे त्यांनी सांगितले. स्वसंरक्षण, कबडडी, साखळी खेळ यासारखे खेळ त्यांनी यावेळी घेतले. तसेच विद्यार्थ्यांना आपले मनोगत व्यक्त करायला सांगून त्यांना भविष्यात काय करायचे ते विचारले.

इतर उपक्रम :

१. मतदान जागृती रॅली

नवमतदार नोंदणी आणि मतदानाविषयी जागृती व्हावी या हेतूने गावामध्ये मतदान रॅली काढण्यात आली. यावेळी विद्यार्थ्यांकडून स्लोगन तयार करून ती देण्यात आली. यावेळी मतदार राजा जागा हो लोकशाहीचा धागा हो, जागरूक समाजाची ओळख बनू मतदार नोंदणी १०० टक्के करू, लोकशाहीची हाक ऐकू या मतदार यादीत नाव नोंदवूया, मतदार यादीत नाव नोंदवू, सुजान नागरिकांचे कर्तव्य बजावू, जनामनाची पुकार आहे,

मतदान आमचा अधिकार आहे अशा घोषणा दिल्या. तसेच मतदान जागृती या विषयावर पोस्टर स्पर्धा आयोजित करण्यात आली .

२. तू माझा सांगाती या मा. श्री. शरदचंद्रजी पवार यांच्या पुस्तकाचे वाचन

३. हळदीकुंकू

गावातील महिलांची ओळख व्हावी, त्यांच्याशी संवाद साधता यावा, त्यांचे सणवार, संस्कृती या विषयीची माहिती करून घेण्यासाठी हळदीकुंकवाचे आयोजन करण्यात आले. यावेळी विद्यार्थिनींनी उपस्थित महिलांना विडयाचे पान सुपारी आणि तुळशीचे रोप दिले. या कार्यक्रमाला महिलांचा मोठा प्रतिसाद लाभला. महिलांनी यावेळी त्यांना माहिती असलेली गाणी म्हटली.

समारोप समारंभ :

शिबीराचा समारोप समांरभ प्रसंगी प्रमुख पाहुणे म्हणून श्री. यशवंत शितोळे, पुणे जिल्हा शिक्षण मंडळाचे खजिनदार मा. अड. मोहनराव देशमुख, सरपंच श्री. भडाळे, महाविद्यालयाचे प्राचार्य डॉ. नितीन घारेपडे, गावातील मान्यवर श्री. सतीश बाठे, श्री. श्रीकांत खाटपे, श्री गोळे उपस्थित होते.

कार्यक्रमाचे प्रास्ताविक करताना रा. से. यो कार्यक्रम अधिकारी डॉ. सविता कुलकर्णी यांनी शिबीरातील विविध उपक्रमांची माहिती दिली. गावामधील अंगणवाडीतील मुलांच्या दात आणि डोळयांची तपासणी, गावातील पाणी, प्राणि, वनस्पती, पिकांचा प्रकार, भाषा, गावचा इतिहास, गावातील राजकारणामधील स्त्रियांचा सहभाग, बालाजी मंदिर या धार्मिक पर्यटन स्थळाचा गावावर होणारा परिणाम अशा अनेक गोष्टींचे सर्वेक्षण करण्यात आल्याची माहिती त्यांनी दिली.

यानंतर सहाभागी विद्याथ्र्यांपैकी श्वेता कदम आणि रामकृष्ण सुतार या विद्यार्थ्यांचा उत्कृष्ट स्वयंसेवक म्हणून आणि साने गुरूजी या गटाचा उत्कृष्ट गट म्हणून सत्कार करण्या आला. तसेच विद्यार्थी ओम शिंगोटे, रामकृष्ण सुतार, पूर्वा पात्रे, श्रुती भोसले या विद्यार्थ्यांनी आपले मनोगत व्यक्त केले. गावातील मान्यवर श्री हर्षल जगदाळे, श्री. बाठे, श्री. गोळे यांनी आपले मनोगत व्यक्त केले. यानंतर महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांनी राष्टीय सेवा योजना हा अत्यंत स्तुत्य उपक्रम असूनयामधून विद्यार्थ्यांना एक व्यासपीठ मिळते आणि त्यातूनच त्यांना त्यांच्यातील उत्तम गोष्टी कळतात आणि त्या विकसित करण्याची संधी मिळते. यावेळी त्यांनी महाविद्यालयातील विविध शिक्षक आणि विद्याथ्र्यानी सर्वेक्षण केलेल्या विषय, त्याची उद्दीष्टे, अभ्यासपध्दती या विषयीची माहिती देणारे प्रेझेंटशेन केले.

यानंतर श्री. यशवंत शितोळे यांनी गावामध्ये केलेल्या कामांची विद्याथ्र्यांकडून माहिती करून घेतली. आणि आपणही राष्टीय सेवा योजना असल्याचे सांगितले. समाजातील सर्वांचा मोबाईल्चा वाढता वापर लक्षात घेउन त्यांनी मोबाईल ही नविन आणि वेगळी संकल्पना विद्याथ्र्यांना सांगितले.श्रमदान, व्याख्यान, हे करत असताना

त्याचा आनंद घेतला पाहिजे असे त्यांनी सांगितले. यावेळी शिबीराचा अहवाल मा. श्री. मोहनराव देशमुख यांना दिला. यांनतर अड श्री. मोहनराव देशमुख यांनी आपले मनोगत व्यक्त करताना रा.से.यो विषयी माहिती देताना हा उपक्रम अतिशय भव्य गोष्टी डोळयासमोर ठेवून केल्याचे सांगितले. विद्यार्थी या शिबिरामधून अनेक गोष्टी शिकतात असे मत त्यांनी व्यक्त केले. कार्यक्रमाचे सूत्रसंचालन प्रा. नितीन लगड यांनी तर आभारप्रदर्शन डॉ. अंजू मुंढे यांनी केले. महाविद्यालयाच्या वतीने डॉ. सविता कुलकर्णी, डॉ. नितीन ल्गड, डॉ. अंजू मुंढे, प्रा. गौरव शेलार, प्रा. गणेश आवटे यांचा सत्कार करण्यात आला.

या शिबिराचे आयोजन डॉ. सविता कुलकर्णी, प्रा. नितीन लगड, डॉ. अंज मुंढे, प्रा. गौरव शेलार, डॉ. वंदना सोनवले, प्रा. गणेश आवटे यांनी महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांच्या मार्गदर्शनाखाली केले.

CHANGING AGRICULTURAL PRACTICES IN KETKAWALE PURANDAR TEHSIL, MAHARASHTRA

Dr. Savita Kulkarni **Prof. Shital Gaikwad**
(Department of Geography)

Introduction :

India is known for its agricultural economy and it plays a crucial role in Indian economy which provides employment opportunities to rural agricultural and non-agricultural labourers. The majority of the country's population depends on agriculture for their livelihood.

The Indian Economy holds the sixth position in the world's top economies. Agriculture has major contribution to the country's GDP. It provides employment and it is largest employee sector. Agriculture is the source of food and it is source for raw material for industry. Agro-products such as tea, coffee, sugar, cashew nuts, spices, etc., which are edible and textile products such as jute, cotton, and others contribute 50% and 20% respectively to the total export of the total country. Agriculture is the most significant source of income for the central and state governments. it is clear that agricultural growth is a necessary precondition for sectoral diversity and economic development.

Although agriculture is major contributor in Indian economy still it faces many challenges. Dependency on rainfall, land ownership, fragmentation of holding, land tenure, labours, manures, fertilizers and biocides, meagre irrigation facilities, lack of mechanisation, agricultural marketing, transport facilities, decreasing production are the challenges faced by Indian agriculture. In which agriculture production mainly affects due to agricultural practices

With the aim of study of agriculture in ketkawale Village in Purandar we have taken two major effects on production are agricultural practices with special reference to soil analysis. Following aims and objectives for the study are taken into consideration. The article provided assessment of agricultural practices in ketkawale Village.

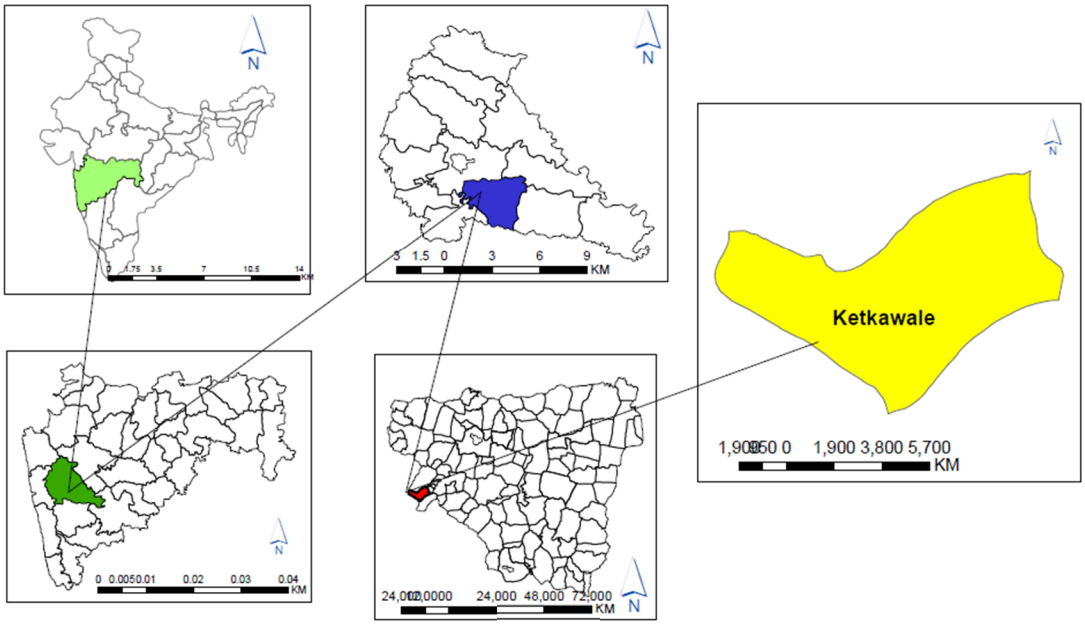
Study Area:

A Study area is ketkawale Villagein a Purandhar Tehsil heaters. Administratively Purandhar Taluka is in the southern region in Pune District. It has a total of 108 villages

and 3 towns (Jejuri, Sasvad, Nira). Ketkawale village is located in Purandhar tehsil of Pune district in Maharashtra, India. It is situated 12km away from sub-district headquarter Sasvad (tehsildar office) and 45km away from district headquarter Pune. As per 2009 stats, Ketkavale is the gram panchayat of Ketkawale village.

The total physical area of village is 483 hectares. Ketkawale has a total population of 1,250 peoples, out of which male population is 627 while female population is 623. Literacy rate of ketkawale village is 72.32% out of which 78.79% males and 65.81% females are literate. There are about 236 houses in ketkawale village.

Location Map Ketkawale Village



Objectives :

1. A study of Changing Crop Pattern
2. A study of changing Agricultural Practices
3. Toanalyze changing pattern and agricultural practices affecting to Environment.

Methodology:

1. **Field Survey:**

   Quesionary fill up 10% household data.

   Soil sample: soil samples data collection to Cropwise soil .

2. **GIS platform:**

   by geo-referencing the available information for its utilization for preparation of maps.

sample	Location	PH value	salinity	Nitrogen (N)	Phosphorus (P)	Potassium (K)	Sodium (Na)	Organic car.	Lime
A	18° 15' 11.52" N 73° 56' 02.86 E	8.16	0.13	207.00	210	43.37	1.86	0.86	8.40
B	18°15'15.32"N 73°56'4.93"E"	7.29	0.18	163	310	24.91	1.10	0.68	15.12
C	18°15'8.55"N 73°55'57.68"E	7.40	0.12	185	382	31.18	1.14	0.77	20.74
D	18°15'34.83"N 73°56'3.43"E	7.08	0.09	200	210	24.37	1.86	0.83	11.20
E	18°15'31.72"N 73°55'57.85"E	7.28	0.25	221	318	39.24	2.10	0.92	9.52
F	18°15'17.81"N 73°55'48.51"E	7.74	0.14	214	286	35.66	1.78	0.89	10.08

High Value
Low Value

(**A** = Wheat ,**B** = Onion**, C** = Pulses, **D** = Jawar , **E** = Bajara , **F** = Rice)

Soil pH –

soil pH measures alkalinity or acidity of soil. Correct pH is important for healthy plant growth and agricultural practices can alter the pH of soil. It has impact of biological activities of the plant and mineral nutrient quality. The pH observed in collected samples ranges from 7.08 to 8.16. Significant variation in pH is observed in the soil. Wheat having highest ph 8.16 and jawar having lowest ph 7.08 in this chart which indicate ph range is normal to medium.

Electrical Conductivity(EC) –

Soil electrical conductiity (EC) is a measure of the amount of salts in soil (salinity of soil). It is shows nutrient availability and loss, soil texture, and available water capacity. Crop yields, the suitability of the soil for certain crops, the amount of water and nutrients available for plant use, and the activity of soil micro-organisms depends on electrical conductivity. The range observed for collected sample is from 0.09 to 0.25 and is seen normal.

Natural Organic Carbon (NOC) –

Soil organic carbon is a measureable component of soil organic matter. Organic matter makes up just 2–10% of most soil's mass and has an important role in the physical, chemical and biological function of agricultural soils. The range observed for collected sample is 0.68% to 0.92%. At the onion, Pulses, crop of it is medium NOC and other crop generally medium the percentage of organic carbon is good.

Nitrogen –

Nitrogen is found in all soils, and is required by all living creatures. Nitrogen is an essential nutrient for plant growth, development and reproduction. At the Pulses crop Nitrogen is less 185 hec/kg but at the Bajara crop nitrogen is high 221 hec/kg. All crop Nitrogen value less.

Phosphorous –

Phosphorus in plants is key in capturing, storing, and converting the sun's energy into biomolecules. Phosphorus plays a major role in the growth of new tissue and division of cells. Plants perform complex energy transmissions, a function that requires phosphorus. At **210** which is less than Jawar crop standard and high at is but **382** Pulses crop moderate than standard.

Potassium –

Potassium is associated with the movement of water, nutrients and carbohydrates in plant tissue. In the collected samples at and it is **24.37** which is moderate and **43.37** at it is in very high quantity.

Sodium –

Sodium is not an essential element for plants but can be used in small quantities, similar to micronutrients, to aid in metabolism and synthesis of chlorophyll. In some plants, it can be used as a partial replacement for potassium and aids in the opening and closing of stomates, which helps regulate internal water balance. In the collected samples it is **1.10** Onion crop very less and it is **2.10** Bajara very high.

Lime–

Lime is suggested to enhance soil health status through improving soil physic-chemical properties and neutralize the acid produced in the soil. At is **8.40** Wheat crop very less but at it is **20.74** Pulses high in percentage

Summary and Conclusion:

The study area includes the Ketkawale Village in Purandar Taluka. Agriculture is important economic activity in the area. The agriculture is depends on monsoon mainly. The area experiences drought conditions in summer season. Main crops Rice and Bajara, are seen in the area. Changing in this area mostly vegetable and flower crop because balaji mandir tourist come to ketkawale and demand this crop. In the present study pH and electric conductivity found Moderate. Percentage of organic carbon is normal but Nitrogen content is less at all places. Phosphorous in the soil is seen average in all collected samples. Lime is seen very high at three places. On the basis of data collected in the area agricultural practices and cropping pattern should be considered and soil and water management for sustainable agriculture should be practised.

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SOCIO AND ECONOMIC STATUS OF VILLAGE KETKAWALE

Dr.Ganesh Gandhile Prof. Shital Gaikwad
Department of Geography

A socioeconomic survey is an important tool for gathering comprehensive information about a location's social and economic situation. This information aids in visualizing the location's circumstance. After assessing the data, policy framework may be created, and comprehending the problem with the public is critical for policymaking.

The process of increasing the quality of life and economic well-being of people living in rural areas is known as rural development. Traditionally, it has been focused on the extraction of land-intensive natural resources like agriculture and forestry. It is a broad phrase that refers to actions taken to promote the development of areas outside of the mainstream metropolitan economic system.

Aims and Objectives of the village survey-

1) To understand the socio and economic condition of the village.

2) To study the land use and land cover pattern of the village.

3) To know the available energy resources in the village.

Methodology-

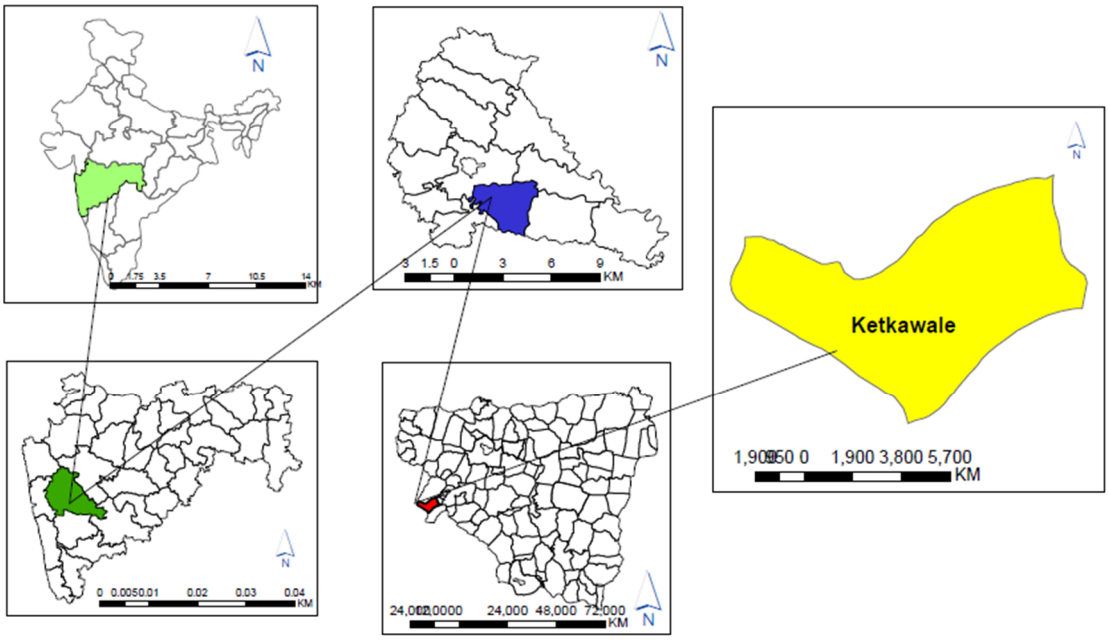
To achieve the above goals, relevant research from the villages is required. A socio-economic survey was done in village Ketkawale the Geography Department in order to better understand the village's socioeconomic characteristics, land use and land cover patterns, livestock breeding, settlement morphology, and living conditions. A household survey was conducted, and primary data was obtained from 236 houses. GPS positions were used to record the locations of 36 houses. Photographs and GPS surveys were carried out. Questionnaires are used to collect information about governmental issues, demography, lifestyle, and occupation. Articles, journals, and other papers are used to gather secondary data.

Study area-

Ketkawale is a village in the Purandar Taluka of Maharashtra's Pune District. The total physical area of village is 486 hectares. Ketkawale has a total population of 1,250 peoples, out of which male population is 627 while female population is 623. Literacy

rate of ketkawale village is 72.32% out of which 78.79% males and 65.81% females are literate. There are about 236 houses in ketkawale village.

Location Map Ketkawale Village



Source-Google Earth pro

Findings-

Ketkawale Local Language is Marathi. Ketkawale Village Total population is 1250 and numbers of houses are 623 Female Population is 48.4%. Village literacy rate is 72.32% and the Female Literacy rate is 65.81%.

The findings of the field visit, questionnaire, and survey provide crucial information on their style of living, sources of income, and amenities they have access to, as well as the problems they encounter in their daily lives. The survey consisted of gathering data from 88 households of Ketkawale village.

Information of person benefited by government-

Government schemes were established with the goal of enhancing people's livelihoods and ensuring their security in order to live a better life. Each plan is designed to benefit individuals in specific aspects of their lives. Some plans are designed to give financial stability, while others are designed to provide socio-economic benefits. The other 14 households benefit from government programmes such as the p.m.awas yojana, the Swaccha Bharat Mission, soil health card, sukaniya samrudhi yojna and the Kisan Credit Card.

Source of portable water-

mostly people having their own water supply arrangement like tube-well, house-tap and well. From 36 household people 21 houses used their own house-tap, 5 having their own tube-well and 4 having common tube-well and others used well.

Modes of storage of water-

almost every one having a water storage tank.

Electricity available per day-

Electricity is one of the most significant gifts that science has bestowed upon humanity. It has also become an integral element of modern life, and it is difficult to imagine a world without it. Electricity serves a variety of purposes in our daily lives. It is used to illuminate rooms, operate fans, and operate household appliances such as electric stoves, air conditioners, and more. All of these give people with a sense of security. Electricity is used to operate massive machines in factories. Food, clothing, paper, and a variety of other commodities are all made with electricity.

Household electricity-

Household electricity is used as a source of energy in all 36 households.

Appliances used in day-

Home appliances play an important role in our daily lives. It is quite helpful in making our daily tasks easier. Certain appliances, such as induction cooktops, refrigerators, and a variety of cooking ranges, make cooking easier. The introduction of washing machines has reduced our time spent doing laundry. Almost each every household has a refrigerator, television, fan, and other equipment such as an iron, geezer, and washing machine.

Cooking fuel-

A household´s fuel choice is strongly influenced by the accessibility, affordability and convenience of the fuel, as well as dependent on the economic and technical options of a household and the respective social and cultural determination. LPG is the primary source of cooking fuel for 36 families, however alternative fuels such as kerosene and wood are also used.

The above data shows that the standard of living is quite high, with modern conveniences and domestic amenities and services such as water pipelines, electricity, and LPG. This is due to the village's advantageous location, which is close to a highway.

Land holding-

The statistical unit for data collection in the Agriculture Census is any land used totally or partly for agricultural production and operated as one technical unit by one person alone or with others without respect to title, legal form, size, or location. 9 households having 1 and ½ acre of land, 07 households having 2 acres of land, 04 households having 3 to 5 acres of land, and we do not having information about 16 household land.

Cultivated-

Land that is utilised to raise crops on a cyclical or permanent basis. Land that is regularly cultivated but has been allowed to fallow for a period of time is also included. Out of 36 households, 5 cultivated lands ranging from 0.5 acre to 5 acre.

Uncultivated-

Uncultivated land is defined as ground that has not been ploughed, renovated, or improved by management procedures, but does not include land that has been mounded for the purpose of riparian woodland planting. Six households had uncultivated fields ranging from 0.5 to 2 acres.

Barren land-

The land which cannot be used for cultivation is called barren land such as hilly terrains, deserts and ravines etc. Seven households had barren land ranging from one to five acres, with three households having more than ten acres of desolate land.12 household information about land was not provided proprerly.

Irrigation system –

Irrigation is the process of applying water to the soil artificially using tubes, pumps, and sprays. Irrigation is commonly employed in locations where rainfall is unpredictable, or where dries spells or drought are predicted. There are a variety of irrigation systems in which water is evenly distributed across the entire field. Here 23 households used irrigation systems such as dripping, flooding, and sprinklers, among other things**.**

Irrigation by-

10 households used a bore well to irrigate their land, 03 households used a tank, river water, or a cannel to irrigate their land.

Use of organic manures-

Manures and other organic sources are utilized to increase soil fertility and organic matter content, as well as to give micronutrients and other growth elements that inorganic fertilizers do not generally provide. Microbial development and nutrient

turnover in soil may be boosted by the use of these items. 32 households employed organic manures, while just 5 households did not.

Use of chemical fertilizer-

Chemical fertilisers enhance plant growth while also having a significant impact on the environment. There is a possibility of groundwater contamination, as well as the environmental difficulties that come with using chemical fertilisers. Only 2 household out of 36 did not use chemical fertilizer. 3 households utilized chemical fertilizer.

Five crops produce in a year-

Wheat, jwari, bajari, rice, pulses are major corps production.

Livestock-

The management and production of domestic, livestock, or farm animals for the goal of getting their flesh and products is known as livestock farming (milk, eggs, leather, etc). Cows, calves, poultry, buffalo and goats are among the livestock raised by 28 households and 08 households don't have livestock rearing.

Shelter for livestock-

there are 3 types of shelter opne7, kaccha3, and pakka5.

Milk production in a day-

The milk produced by 14 households ranges from 2 liters per day to 45 liters per day.

Problems-

water problem, pollution, cleaning, bank, hospital, workless, waste disposal, transportation, drainage, etc.

Suggestion –

Even though the community is well-developed, there is still a need for education on waste management programs, farming methods, and water pollution. For good agricultural results, they must improve agricultural techniques, watershed management, and the use of organic fertilizer and manure. Other sources of money and employment in the village include agro tourism, medicinal plant growing. They must be aware of utilize non-conventional energy resources. Many people are unaware of government programs that they should be aware of it. Well developed tourism program needed for more better job opportunities.

ANALYSIS OF PHYSIOCHEMICAL PARAMETERS TO EVALUATE THE QUALITY OF SOIL AND WATER AT KETKAWLE VILLAGE, MAHARASHTRA, INDIA.

Prof. Shital R. Jagtap
Department of Chemistry
sjchem2020@gmail.com

Abstract-

Soil and water are the most important natural resources for the good health of plant, human being and environment. In the present study it was preferred to investigate the soil and water samples for its physico-chemical analysis of some parameters. Representative samples were obtained and analysed for its colour, texture, pH, EC, TDS, TSS with an objectives soil survey, mapping and analysis of physic-chemical properties of soil of different land and sources of water at ketkawale villege.

Keywords: Physico-chemical, EC, PH, TDS, TSS

Introduction-

The word soil is derived from a latin word ‘solum’ meaning floor. Soil is important to everyone either directly or indirectly. It is natural body on which agriculture product grow and it is fragile ecosystem. An understanding of physical and chemical condition of any soil it is essential for proper implementation of the other management practices. Therefore the physico-chemical study of soil is very important because both **physical and chemical properties which affect the soil productivity.** In recent years, most of the farmers are using the excess amount of fertilizers and pesticides. Due to excess use of chemicals soil quality decreases. Small crop also affected due to large use of fertilizers and pesticides. So it important to analyse soil and water. Above information helps to farmers to use integrated nutrient management practice to maintain optimum concentration of all the essential nutrients for plants. It is also very essential and important to test the water before it is used for drinking, domestic, agricultural or industrial purpose. Water must be tested with different physico-chemical parameters. Selection of parameters for testing of water is solely depends upon for what purpose we going to use that water and what extent we need its quality and purity. With this aim Soil and water samples from the village Ketkawale were collected

Objective:

1. To determine chemical parameters such as hardness, PH and conductivity of water samples.
2. To determine chemical parameters such as conductivity and PH of soil samples.

Materials and Methods-

Ketkawale village is located in Purandhar tehsil of Pune district in Maharashtra, India. It is situated 12km away from sub-district headquarter Sasvad (tehsildar office) and 45km away from district headquarter Pune. The investigation was undertaken to evaluate the soil and water properties of different crop land and water sources. Soil and water samples were collected from 7 different crop land of Ketkawale village, Mharashtra. The collected soil samples were brought to laboratory, air dried, grinded and sieved through 2 mm wire mesh and samples were analysed for different properties like colour, texture, PH, EC, TDS, TSS. The Water Samples were also collected from different sources in the Morning Hours between 10 to 11am, in Polythene Bottles. The Water samples were immediately brought in to Laboratory for the Estimation of various Physico-chemical Parameters like colour pH, conductance were recorded by using Digital pH Meter and conductometer.

Colour:

Soils exhibit a variety of colour. The variation in soil colour is due to the organic substances, iron compounds, silica lime and other inorganic compounds. The organic substances impart black or dark grayish black colour to soils. Iron compounds are resposnsible for brown, red and yellow colour of soils. Silica, lime and some inorganic compounds give light white and gray tinges to the soil. Soil colours are most conveniently measured by comparison with a Munsell colour chart.

Texture:

Texture means size of the particles. Soil texture is the **average size of the soil particle** which depends on the relative proportion of sand, silt and clay in the soil. If the proportion of sand in the soil is increased, the average size or the soil particles increases and the resultant soil becomes coarser in texture. Soil texture refers to the relative percentage of sand, silt and clay in a soil. Natural soils are comprised of soil particles of varying sizes. Texture is an important soil characteristic because it will partly determine water intake rates (absorption), water storage in the soil, and aeration status etc. and combined to influence soil fertility.

pH – pH is **a measure of the acidity or alkalinity of the solution.** A pH value is actually a measure of hydrogen ion concentration. Its effects on all other parameters of soil and water. Therefore, pH is considered while analysing any kind of soil and water. If the pH is less than 6 then it is said to be an acidic, the pH range from 6-8.5 it's a normal and greater than 8.5 then it is said to be alkaline.

Electrical conductivity (EC)

Electrical conductivity Electrical conductivity is also a very important property of the soil and water it is used to check the quality of the soil and water. It is a measure of ions present in solution. The electrical conductivity of a solution increases with the increased concentration of ions. Electrical conductivity is a very quick, simple and inexpensive method to check quality of soils and water. It is a measure of ions present in solution. The electrical conductivity of a soil and water solution increases with the increased concentration of ions.[1]

Total dissolved solids (TDS)

TDS stands for total dissolved solids, and represents the total concentration of dissolved substances in Soil and water. Soil salt content can be measured in a laboratory by measuring the total dissolved solids in a sample TDS is made up of inorganic salts, as well as a small amount of organic matter. Common inorganic salts that can be found in water include calcium, magnesium, potassium and sodium, which are all cations, and carbonates, nitrates, bicarbonates, chlorides and sulfates, which are all anions. Cations are positively charged ions and anions are negatively charged ions. where TDS is expressed in mg/L and EC is the electrical conductivity in microsiemens per centimeter at 25 °C. The conversion factor k_e varies between 0.55 and 0.8.[5] Some TDS meters will use this electrical conductivity measurement to then infer the number of parts per million (ppm) using the above formula; 1 ppm indicates 1 mg of dissolved solids per kg of water.[6]

Total dissolved solids (TDS) is usually low for freshwater sources, at less than 500 ppm. Seawater and brackish (mixed fresh and sweater) water contain 500–30,000 and 30–40,000 ppm TDS, respectively. TDS is most accurately measured by weighing a filtered sample, and drying at 105°C until no further mass is lost. A more rapid method is to use conductivity, which is proportional to TDS. This is particularly important in the case of very high purity water, whose quality is often specified as a conductivity in microsiemens per centimeter.it is measure of soilsalinity.[14]

Total soluble salts (TSS)-

TSS Refers to the total amount of soluble salts in a soil-saturated paste extract expressed in parts per million or milligrams per liter (ppm or mg/L). A linear relationship exists between TSS and EC within a certain range that can be useful to closely estimate soluble salts in a soil solution or extract

Result and discussion:

Physico - chemical properties of soils –

The soil acts as a natural pool of various nutrients and plays a critical role in maintaining the growth and development of plants.[3] The physic-chemical properties of the soil of the crop lands at Ketkawale village investigated has been described as below-

Chemical Analysis of Representative soil and water samples collected from different places were subjected to chemical analyses to infer quality, some important factors are described

Sample No	Samples	Colour	Texture	PH	Soil type	Conduc-tance ($mmhoscm^{-1}$)	TDS Ppm	TSS Mg/L
Soil Sample 1	Jawar	Black	Slit	7.19	Highly alkaline	0.295	188.8	29
Soil Sample 2	rice-1	Light brown	Clay	7.23	Highly alkaline	0.331	211.8	33
Soil Sample 3	Corn	Brownish Black	Slit	7.20	Alkaline	0.256	163.8	25
Soil Sample 4	rice-2	Brown Black	Clay	7.35	Alkaline	0.321	205.4	32
Soil Sample 5	Onion	Black	Slit	7.22	Slightly acidic	0.322	206.0	32
Water Sample 1	Damp Water	Colourless	--	7.3	Neutral	0.266	170.2	26
Water Sample 2	Well Water	Colourless	--	8.83	Alkalaine	0.426	272.6	42

We had collected samples from different crop areas of Ketkawale. We found that the values of soil pH (Table 1) in this area range from 7.4 to 7.9 indicating an alkaline nature of soil while EC values range from 0.266 to 0.426 mS/cm (normal EC ranges

from 0.02 to 2.0 mS/cm) and such soil is said to be non-saline. TSS range is 25 to 45 that is close to standard value ie.20to 40mg/L.

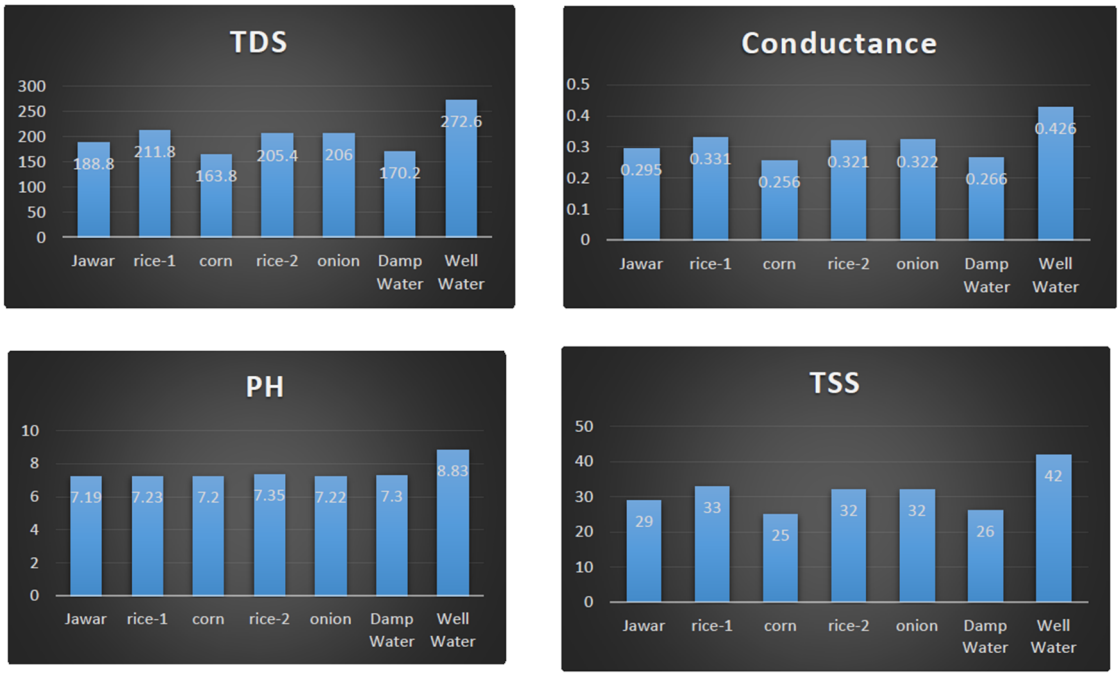


Fig 1 TDS, TSS, PH and Conductivity of soil and water

Conclusion

These collected samples were analysed for their various physic-chemical properties. The physical properties such as colour, soil texture has been determined by daily routine procedures **(Saha,2004).**The chemical characteristics viz. soil pH. electrical conductivity, has been determined by routine standard procedure **(Black, 1965)**.To assess the quality of water each parameter was compared with the standard desirable limits prescribed by World health organization (WHO) [11,12,13].From the study it can be concluded that water is safe for drinking purposes from the point of view of levels of pH, EC, TDS,

Recommendations:

The village is not much small and clean. Ketkawale village is developed due to Tirupati Balaji Temple, devotees of Lord Venkateshwara, still need some awareness about crop variation and about organic farming. Public awraeness about these phenomenon should be done and campus posters and workshop should be undertaken.

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SURVEY ON ENERGY SOURCES AND THEIR CONSUMPTION USED BY CITIZENS AT KETKAVALE VILLAGE

Prof. Khare T. P., Prof. Shah S. S., Prof. Mene R. U., Prof. Joshi R. P.
(Dept. of Physics)

Introduction:

Energy is the most basic material demand for the existence and development of human being. The classical description of energy is the ability to perform work, but as energy exists in so many forms, it is hard to find one comprehensive definition. In the case of the developing countries, the energy sector assumes a critical importance in view of the ever increasing energy needs requiring huge investments to meet them. There are numerous sources of energy. Energy can be classified into several types based on the following criteria:

- Primary and Secondary energy
- Commercial and Non-commercial energy
- Renewable and Non-Renewable energy

Primary and Secondary energy:

Primary energy sources are those that are either found or stored in nature. Common primary energy sources are coal, oil, natural gas, and biomass (such as wood). Other primary energy sources available include nuclear energy from radioactive substances, thermal energy stored in earth's interior, and potential energy due to earth's gravity. Primary energy sources are mostly converted in industrial utilities into secondary energy sources; for example coal, oil or gas converted into steam and electricity. Primary energy can also be used directly. Some energy sources have non-energy uses, for example coal or natural gas can be used as a feedstock in fertilizer plants.

Commercial Energy and Non Commercial Energy:

The energy sources that are available in the market for a definite price are known as commercial energy. By far the most important forms of commercial energy are electricity, coal and refined petroleum products. Commercial energy forms the basis of industrial, agricultural, transport and commercial development in the modern world. In the industrialized countries, commercialized fuels are predominant source not only for

economic production, but also for many household tasks of general population. Examples: Electricity, lignite, coal, oil, natural gas etc. The energy sources that are not available in the commercial market for a price are classified as Non-commercial energy. Non-commercial energy sources include fuels such as firewood, cattle dung and agricultural wastes, which are traditionally gathered, and not bought at a price used especially in rural households. These are also called traditional fuels. Non-commercial energy is often ignored in energy accounting. Example: Firewood, agro waste in rural areas; solar energy for water heating, electricity generation, for drying grain, fish and fruits; animal power for transport, threshing, lifting water for irrigation, crushing sugarcane; wind energy for lifting water and electricity generation.

Renewable and Non-Renewable energy:

Renewable resources of energy can be naturally replenished and are available plentiful in nature. These resources are sustainable and are safe for environment.

A Non-renewable resources is a natural resources that is found underneath the earth. This type of energy resources do not replenish at the same speed at which it is used. They take millions of years to replenish. The main examples of non-renewable resources are Natural gas, coal, petroleum, nuclear energy of hydrocarbon gas liquid etc. Use of non-renewable resources is harmful for environment & once resources are used they are gone forever.

In India, Villagers in villages uses traditional methods of energy consumptions for various households' works. For different households work we use various gadgets which consumes Non-renewable and renewable resources.

Aim & Objective:

- To enlist use of available types of energy sources used for their utilization by citizens of this village.
- To determine energy consumption of that sources.
- To classify this energy sources as a non-renewable and renewable energy sources with reference to equipment used as energy sources.

Methodology:

In most of the villages, villagers mainly use non –renewable energy source for various households' works. If they would continue to utilize these sources the wellness of environment as well as their health will badly affect. That's why, to preserve the

environment, beauty of nature, wellness of villager's health. We need to create awareness among villagers.

We select Ketkavale village for the energy consumption survey. One of the important reasons is that it is a religious and popular temple of 'GOD BALAJI'. Ketkavale village comes under Purandar Taluka, Pune District, Maharashtra in India. As per available data from the year 2009 total area of Ketkavale 483 hectors. The agricultural area is 312 ha about 2 ha is in non-agricultural and about 115 ha is used permanent pastures and grazing lands about 8 ha is under miscellaneous tree corps about 37 ha is lying as current fallow area. About 9 ha are covered by barren and uncultivable land.

GPS Co-ordinate and Image of Ketkavale Village
Latitude
18.259395º or 18º10'29"north
Longitude
73.937881 or 73º52'45"east

The maximum temperature in summer is about 38ºC while the minimum temperature in winter is 12 ºC. The span of rainy season is about 2-3 months. According to geography sunlight and wind are the constantly replenished sources of Renewable Energy.

Hence we select Ketkavale Village for Energy Consumption Survey. This survey is surely going to help us to create awareness in popular village.

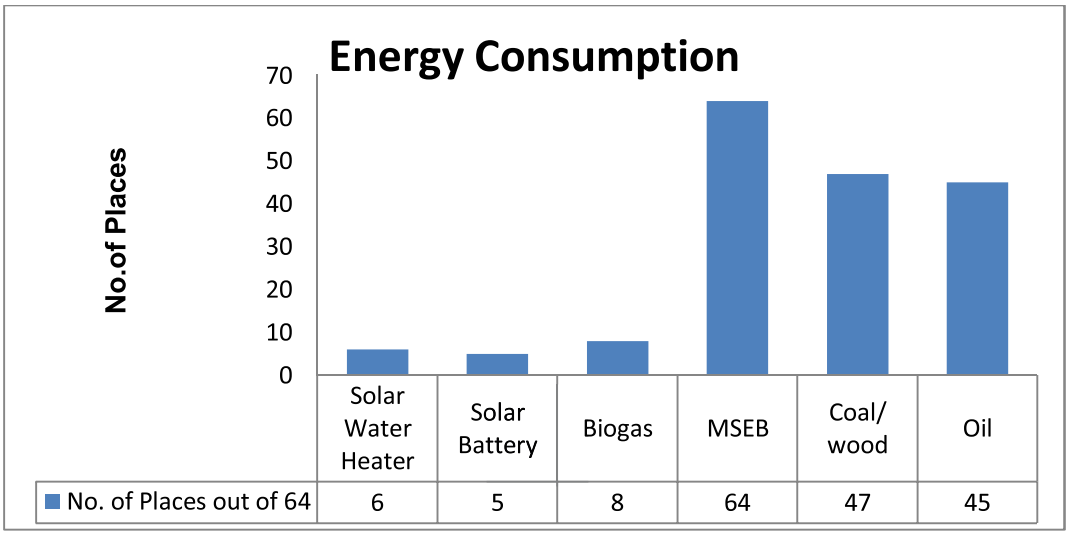
The survey is categorized, whether villagers are using Renewable or Non-Renewable energy sources for various households work, entertainment, and communication purpose villagers use many different gadgets.

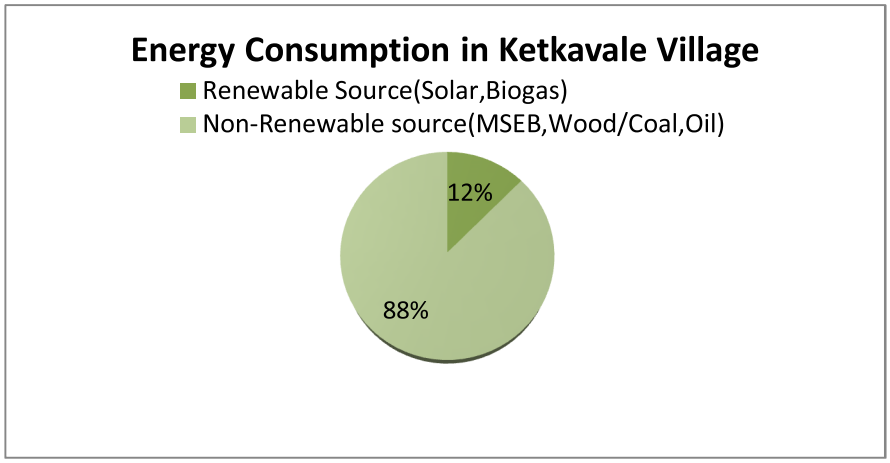
Result and discussion:

With reference to above, we have visited about 64 places like House, Farmhouse, Temples, Office areas, Storage rooms etc. for the collection of sample data we extract energy sources used in equipment's and energy consumption.

From this data we have classified this information with particular attributes as sources used, type of sources (Non-renewable or Renewable resources) and Electricity Bill.

From available energy sources in ketkavle village all visited 64 places uses electricity from MSEB for Lighting Home Appliances, Water motor pump etc. Even though villagers have MSEB connection, 73% of Places uses Coal/Wood for Water heating, bonfire, cooking etc. For transportation purpose 70% Places use Oil Source, where 6 Places uses Solar water Heater, 5 places uses Solar Battery and 8 places uses Biogas.





Conclusion:

This survey reveals that first and foremost used energy source for consumption is Non-Renewable in Ketkavale village However 12 % places uses Solar Energy which is Renewable energy source. From this figure we can conclude that the awareness of using Renewable energy sources is awakening among villagers in Ketkavle.

Recommendation:

As per Geographical location of Ketkavale village, there is abundance scope to use solar energy (Renewable Source) for consumption. Hence we should take initiative to reach maximum Government Schemes (viz PMKUSUM-Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan) on using Solar Energy.

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CHECKLIST OF ANIMAL DIVERSITY IN KETKAWALE VILLAGE OF PURANDAR TEHSIL

Dr. Anju Mundhe, Dr. Sharad Giramkar, Sachin Pawar,
Devidas Holkar, Rohan Kunjir, Ajay Shinde
Department of Zoology
aymundhe@gmail.com

Abstract:

Animal survey was performed at Ketkawale village of Purandar Tehsil. Animal survey was conducted in winter season. Observed animals were photographed and identified by using identification keys. A checklist of 50 animals was prepared by a walking survey method. Out of these, 25 animals belong to 22 families of Phylum Arthropoda while 26 animals belong to 22 families of Phylum Chordata. Around 21 bird species resident in the Ketkawale village. It indicates the importance of the village as an ecosystem.

Keywords: Ketkawale, Village survey, Biodiversity, Animals, Birds, Insects

Introduction:

Western Ghats is the biodiversity-rich region of India and Ketkawale is located in its eastern portion. The common animals recorded in this region are leopard, wild deer, rabbit, Indian rat snake, uncommon migratory birds etc. To safeguard these areas and market them as tourism attractions, the state has made appropriate steps to establish numerous wildlife parks and sanctuaries. Biodiversity is necessary for all species on Earth, including humans, to function properly. We cannot have healthy ecosystems that give us with the air we breathe and the food we consume without a diverse range of animals, plants, and microorganisms (Giramkar et.al 2022). Animal biodiversity is essential to maintain the stability of the ecosystem. To help protect the diversity, there is a need to generate a checklist of animals. Hence the objective of the present study was to prepare a checklist of animal diversity in the study area.

Materials and methods:

a. Study area:

Ketkawale village of Purandar Taluka is located in the Pune district of Maharashtra state (18.25973N, 7393685W). Ketkawale has a total population of 1250 people,

out of which male population is 627 and female population is 623. The study area selected for the present study was in and around the Ketkawale village, measured approximately about 483 hectares. Selected survey site comprises different ecosystems such as agricultural, hilly area, water bodies and domestic area. Economic activities observed in this village were related with agricultural activity, poultry, dairy and tourism.

b. Data collection:

Animal biodiversity was documented by walking surveys and photographs. Survey was conducted in the month of January 2023. Walking survey was conducted along all pathways of the village.

Figure 1: Map of Ketkawale village of Purandar Tehsil, District Pune

Result and Discussion:

Study area is the natural habitat of 50 animal species. Agriculture and tourism are the primary activities in the village. Variety of spiders are observed and recorded in the studied area (Karthikeyani et al. 2017). Study area is the natural habitat of mammals such as domestic mammals (Nameer, 2015).

Sr. No.	Class	Family	Local name	Scientific name
1	Insecta	Apidae	Small Honey bees	*Apis florea*
2			Giant Honey bees	*Apis dorsata*
3			Carpenter bees	*Xylocopa*
4		Coccinellidae	Fungus-eating Ladybird	*Illeis galbula*
5		Nymphalidae	Common crow butterfly	*Euploea core*
6		Pieridae	Common yellow butterfly	*Eurema*
7		Mantidae	Green Praying mantis	*Mantis spp 1*
8			Yellow stick praying mantis	*Mantis spp 2*
9		Blattidae	Cockroach	*Periplaneta americana*
10		Termitidae	Termites	--
11		Meloidae	Blister beetle	*Hycleus*
12		Vespidae	Wasp	--
13		Gryllidae	House cricket nymph	*Acheta domesticus*
14		Coreidae	Leaf footed bug	*Mictis*
15		Chrysopidae	Green lacewing	*Nothancyla verreauxi*
16		Acentropinae	Pond moth	*Hygraula nitens*
17		Ululodes	Owlfly Larva	--
18		Gerridae	Water striders	--
19	Arachnida	Uloboridae	Spider	*Uloborus*
20		Araneidae	Spider	*Cyclosa*
21		Hersiliidae	Spider	*Harsilia*
22		Thomisidae	Yellow stripe spider	*Thomisus*
23		Pholcidae	Dady leg spider	*Crossopriza*
24	Chilopoda	Scolopendridae	Gom	*Scolopendra*

25	Malacostraca	Potamidae	Asian freshwater Crab	*Nanhaipotamon*
25	Reptile	Gekkonidae	Wall lizard	*Hemidactylu*
26		Chamaeleonidae	Chameleon	*Chameleon*
27		Colubridae	Indian rat snake	*Ptyas*
28	Mammal	Bovidae	Jersey Cattle	*Holstein Friesian*
29		Muridae	Rat	*Rattus rattus*

Table 1: Animal from phylum Arthropoda and Vertebrata

(Class: Fish, Reptile and mammals)

Avian diversity was also studied. With the help of observation 21 bird species were found to be resident (Jaiswal et al. 2017).

Sr. No.		**Family**	**Local name**	**Scientific name**
1	Class: Aves	Corvidae	House crow	Corvus splendens
2			Jungle Crow	Corvus culminatus
3		Passeridae	Sparrow	Passer domesticus
4		Cuculidae	Asian koel	*Eudynamys scolopaceus*
5		Dicruridae	Ashy Drongo	*Dicrurus leucophaeus*
6		Ploceidae	Baya weaver	*Ploceus philippinus*
7		Dicruridae	Black drongo	*Dicrurus macrocercus*
8		Accipitridae	Black eared kite	*Milvus lineatus*
9		Sturnidae	Brahmni starling:	Temenuchus pagodarum
10			Common myna	*Acridotheres tristis*
11		Accipitridae	Hen harrier	Circus cyaneus
12		Aicedinidae	White throated king fisher	Halcyon smyrnensis
13		Apodeidae	Swift	Apus
14		Ardeidae	Indian pond heron	Ardeola grayii
15			Medium Egret	Egretta intermedia
16		Dicruridae	Black drongo	Dicrurus macrocercus
17			Ashy drongo	Dicrurus leucophaeus
18		Meropidea	Little green bee eater	Merops orientalis

19		Nectariniidae	Purple sunbird	Cinnyris asiaticus
20		Coraciidae	Indian roller	Coracias benghalensis
21		Motacillidae	White wagtail	Motacilla alba

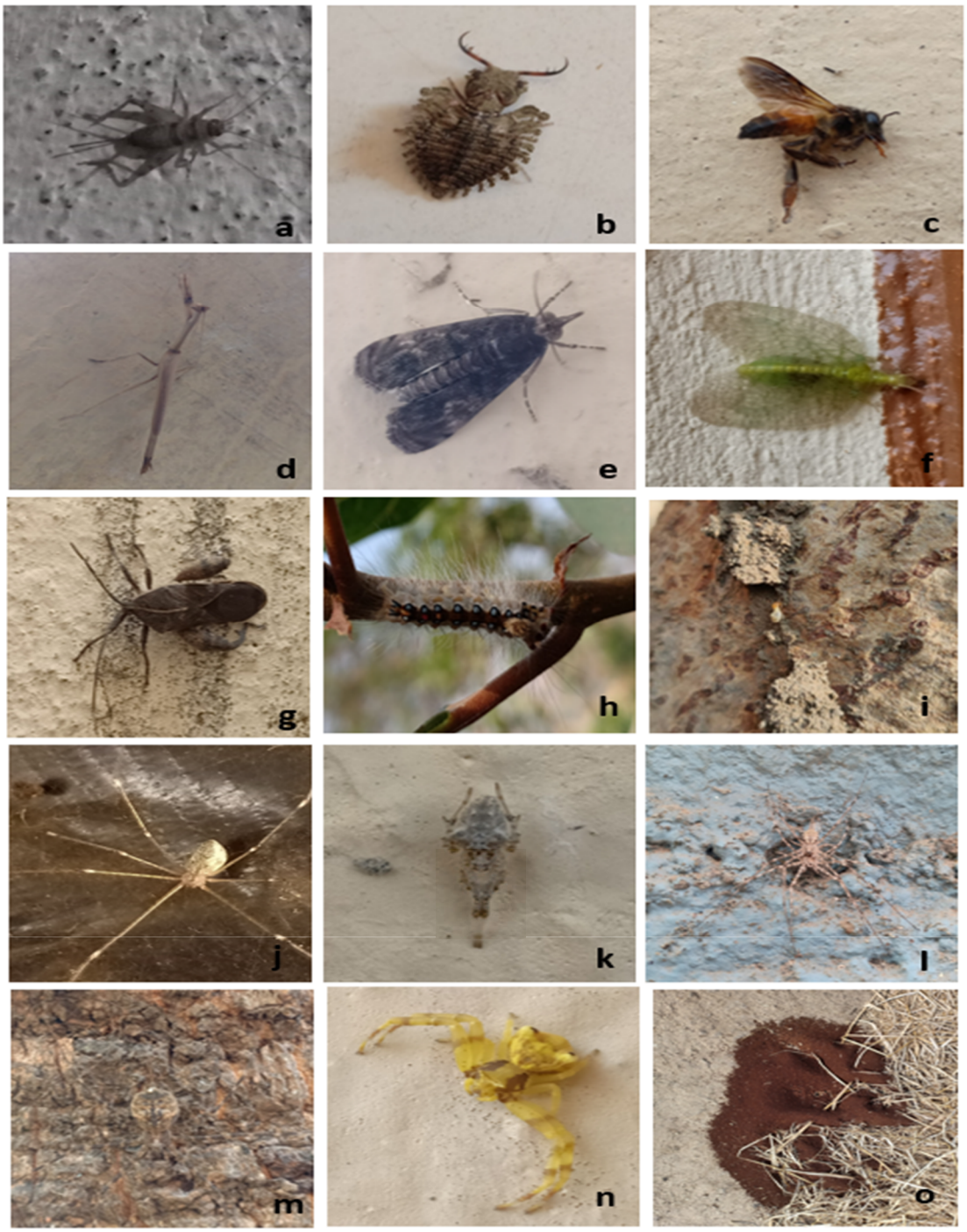

Figure 2: Animals of Ketkawale (a)Cricket nymph, (b) Owlfly Larva, (c) Apis dorsata, (d)Praying mantis, (e) Moth , (f) Green lacewing, (g) Leaf footed bug, (h) Caterpiller, (i) Termites, (j) Dady leg spider, (k) Uloborus, (l) Harsilia sp1, (m) Harsilia sp1, (n)Thomisus Spider , (o) Red ants

Based on the observation Ketkawale village could be considered as an important place harboring faunal diversity. Further assessments need to be conducted over a longer period in different seasons to understand diversity and variation in habitat associations.

CONCLUSION:

We found rich animal diversity in study area and require frequent animal survey due to seasonal variation in study area.

CONFLICT OF INTEREST:

The authors declare that there are no conflicts of interest.

ACKNOWLEDGMENTS:

Authors are thankful to Principal Dr. Nitin Ghorpade (PDEA's Annasaheb Magar Mahavidyalaya Hadapsar, Pune-28) for his continuous support during animal survey. Thanks to Dr. Savita Kulkarni as coordinator and all the members of the NSS committee who have offered every possible support during the animal survey.

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PLANT SURVEY AT KETKAWALE VILLAGE, TAL. PURANDAR, DIST. PUNE

Ms. Jagtap Bhavana D. Prof. Dr. Danai-Tambhale S. D. Prof. Dr. Ranadive K. R.

Department of Botany

Abstract:

Medicinal plants have important role in the modern medicine nowadays like homeopathy, Ayurveda, Unani. Field survey was carried out in the region of Ketkawale village in order to study vegetation. Study was focused on collection of medicinal plants of the region. In the present investigation, total 42 plant species were recorded. Out of which belongs to 42 of the family. The current study, which focuses on medicinal plants and their local uses in healthcare also noted other ornamental cultivated plants around residences.

Keyword : Plant Survey, Ketkawale, Unique Families,

Introduction:

The present survey, taken in Ketkawale village, Taluka Purandar. It is located in Pune District of Maharashtra, India. During the survey, a total of 42 valuable medicinal plant species belonging to various families were identified. In this study, the medicinal plants, ornamental plants and cultivated plants studied, identified upto the genus and family. The relevant information with respect to their botanical names was confirmed on the basis of **Flora of Bombay Presidency, Theoder Cooke.** The medicinal plants are used for common diseases like toothache, skin infections, urine infection, cough and cold by the localities of Ketkawale village. This survey will helpful to guide the residents of the village to keep various ailments under control. use of plants for medicine if studied in scientific way, it will be beneficial for mankind. Medicinal plants have direct relationship with human because they have played an important role in development of human culture. Medicinal plants are the most productive natural resources. Plants extracts from leaf, root, stem, fruit, seeds, etc. can be used directly as medicines by a majority of medicine systems around the world. This will helpful to making various products and chemicals for the advantage of all other life forms. Most of these chemical substances are synthesized in plants, as secondary metabolites. They used in the form of ayurvedic and allopathic medicines. The extensive medicinal plants use of herbal remedies and healthcare reparations, like those described in ancient texts

such as Vedas and the bible, and obtained from plants has been traced to the occurrence of natural products with medicinal properties. The extensive medicinal plants use of herbal remedies and healthcare reparations, like those described in ancient texts such as Vedas and the bible, and obtained from plants has been traced to the occurrence of natural products with medicinal properties. The necessity for the integration of local indigenous knowledge for sustainable management and conservation of natural resources received more and more recognition (Posey, 1992). In India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as a regular source of medicine (Pie, 2001). In view of the above, present work was undertaken to collect information on medicinal plants species used by the rural people of Ketkawale village of Pune district for curing several human diseases. The results of this survey can be beneficial to improvement the economy of native Indians who are traditional practitioners. It can also be useful for providing affordable healthcare systems to the poor and people below the poverty line. Purandar taluka is the region under investigation is very rich in biodiversity- constitute the districts Pune. The survey of medicinal plants was practically ignored from this area. Hence, it was felt to undertake the study.

2. Material and Methods:

The present study was a biological screening program of some medicinally important plant species. About 42 plant species belonging to 26 plant families have been recorded from Ketkawale village of Pune district in Maharashtra state part of the Western Ghats, a rich biodiversity hotspot. All the recorded plant families have been arranged according to the Bentham and Hookers system of classification. Each plant species has its own correct botanical names, family, and plant parts used for medicinal purposes. Also, photo plates are given for better understanding.

Table: 1. Observed plant species

Sr. no.	Bota-nical Name of the plant	Family Name	Common name	Habit	Vol	Page no.	Uses	Plant Part used
1	*Mentha pulegium*	Lamiaceae	Pudina, Mosquito plant, pudding grass,	Shrub	II	559,560	Used as a stimulant and to counteract weakness.	Leaves

2	*Crossandra infundibuliformis*	Acanthaceae	Aboli Firecracker flower,	Shrub	II	456	Flower extract used in fever, headache, aperitif, pain etc.	Flower
3	*Crotalaria Pallida*	Fabaceae (Leguminosae)	Kungin, Lokhandi	Shrub	I	249 282	Treated on swelling of the joints and also used as a vermifuge.	Leaves
4	*Mangifera indica*	Anacardiaceae	Mango	Tree	I	291	Effective in diarrhea, haemorrhages, and bleeding Known for astringent properties	Leaves
5	*Rosa landora*	Rosaceae	Gulab, rose	Shrub	I	526	Used for mild inflammation of the skin or lining of the mouth and throat.	Flower
6	*Glycine max* L.	Fabaceae	soyabean	Shrub			Treated as prevention of cancer, hot flashes that occur with menopause, and osteoporosis (loss of bone density)	Seeds
7	*Acalypha wilkesiana*	Euphorbiaceae	Khajoti	Shrub	III	120	Pain reliever, effective on fever and ulcer used by traditional medical practitioners	Leaves
8	*Thuja*	*Cupressaceae*	White-cedar	Shrub			treat liver diseases, bullous bronchitis, psoriasis, enuresis, amenorrhea, cystitis, uterine carcinomas, diarrhea, and rheumatism	Leaves
9	*Colocasia*	Araceae	Alu	Shrub	I	492	Asthma, arthritis, diarrhea, internal hemorrhage, neurological disorders, and skin disorders.	Leaves and stem
10	*Hygrophilla auricul ata*	Acanth-aceae	Gokulak-anta	Shrub	II	444	cure rheumatic arthritis, kidney infections, jaundice, oedema, gout and as an aphrodisiac.	Seeds
11	*Clerodendrum*	Lamia-ceae	Tinderwood	Shrub	II	513	Used to treat the snakebites on	Leaves

	glabrum						livestock and people also for treating coughs, colds, prolapse, wounds and diarrhoea	
12	*Ageratinaripar ia*	Astera-ceae	Mistflo-wer,	Shrub			The plant has strong antifungal properties.	Whole plant
13	*Solanu mpimpi nellifoil ium*	Solana-ceae	Cherry Tomato	Shrub			first aid treatment for burns, scalds, and sunburn.	fruit
14	*Ocimu msantu m*	Lamia-ceae	Tulasi	Shrub	II	521	used in coughs, colds, asthma, and bronchitis	Leaves and seeds
15	*Crotola ria pallida*	Fabac-eae (Legum inosae)	Rattlebox	tree			traditional medicine to treat swelling of the joints and as a vermifuge.	Seeds
16	*Tridax procum bens*	Asterac eae	Ghav Pala or Dagadi Pala	herb			treat bronchial catarrh, diarrhea, dysentery and liver diseases	Leaves
17	*Sorghu m bicolor*	Gram-inae	Jowar	Grass	III	511	anaemia, cancer, and a variety of infectious diseases, including viral diseases.	Seeds
18	*Podoca rpousn erifoliu s*	Podocar paceae	yew plum pine or Buddhist pine	Conif er			treatment of fevers, asthma, coughs, cholera, distemper, chest complaints and venereal diseases	Leaves
19	*Blumea lacera*	Aster-aceae	*Gujarathi, Kolhar*	herb	III	436	traditionally as antispasmodic, antipyretic, antioxidant, anti-diarrheal, liver tonic, expectorant, diuretic, astringent and stimulant as well as to treat bronchitis, fevers and burning sensation	Leaves
20	*Tinospo ra cardifol ia*	Menis-permace ae	Gulvel (I 20)	Climb er	I	20	treatment of fever, jaundice, chronic diarrhea, cancer, dysentery, bone fracture, pain,	Leaves

							asthuma, skin disease, poisonous insect, snake bite, eye disorders.	
21	*Xanthium strumarium*	Astera-ceae	Shanke-shrvar	Bushy plants	II	94	Used as rhinitis, nasal sinusitis, headache, gastric ulcer, urticaria, rheumatism bacterial, fungal infections and arthritis	Leaves
22	*Tragia ramosa*	Euphorbiaceae	Noseburn	Herb			treat inflammation, wounds, eczema, scabies and skin infections.	Leaves
23	*Ebmlicao ffencinalis*	Phyllanthaceae	awala	Tree	I	448	antioxidant, anti-inflammatory, anticancer, adaptogenic, anti-diabetic, nootropic, antimicrobial and immunomodulatory potential	Seed, fruit, Leaves
24	*Azadirecta indica*	Meliac-eae	Neem	Tree	I	220	Used as anti-inflammatory, ntihyperglycaemic, antiulcer, antimalarial, antifungal, antibacterial, antiviral, antioxidant, antimutagenic and anticarcinogenic properties.	Leaves
25	*Aloe vera* L.	Asphodelaceae	Korfad	Herb			Used as anticancer, antioxidant, antidiabetic, and antihyperlipidemic.	Leaves
26	Polyalthia longifolia	Annonaceae.	Asoka Tree Tree	trees or shrubs			effective antimicrobial activity, cytotoxic function, antiulcer activity, hypoglycemic activity, and hypotensive effect	bark and leaves
27	Tamarindus indica	Legumi nosae (Fabaceae)	Chinch	Tree	I	458	it is used in wound healing, abdominal pain, diarrhea, dysentery, parasitic infestation, fever,	Seed, fruit, Leaves

							malaria and respiratory problems.	
28	Psidium guava	Myrtaceae	Peru	Tree	I	529	remedy for gastrointestinal infections such as diarrhea, dysentery, stomach aches, and indigestion.	Seed, fruit, Leaves
29	*Moringa oleifera* L.	Moringaceae	Drumstick	Shrub	I	301	Used to treat skin infections, swelling, anaemia, asthma, bronchitis, diarrhoea, headache, joint pain, rheumatism, gout, diarrhoea, heart problems, fevers, digestive disorders, wounds	root, bark, gum, leaf, fruit (pods), flowers, seeds and seed oil
30	*Musa paradisica*	Musaceae	Banana, keli	Herb	III	150	treat ulcers, dysentery, and bronchitis and cooked flowers are good food for diabetics dysentery and diarrhea and also for the treatment of malignant ulcers.	Fruit
31	*Ficus benghalensis* L.	Moraceae	Banyan, vad	Tree	III	145	used in various nervous disorders i.e. seizure, insomnia, anxiety etc	stem bark, aerial roots, underground roots, vegetative buds, leaves, fruits and latex
32	*Ficus religiosa L.*	Moraceae	Peepul Tree	Tree	III	149	Treated as antiulcer, antibacterial, antidiabetic, in the treatment of gonorrhea and skin diseases.	Leaves
33	*Ficus recemo*	Moraceae	red river fig or	Tree			in Ayurveda, the ancient system of	Leaves

	sa L.		gular				Indian medicine, for various diseases/disorders including diabetes, liver disorders, diarrhea, inflammatory conditions, hemorrhoids, respiratory, and urinary diseases.	
34	*Prunus dulcis*	Rosac-eae	Almond	Tree	*I*	491	used as a mild laxative, and as a remedy for cancer of the bladder, breast, mouth, spleen, and uterus.	Oil, seed
35.	*Eulacal -pyus*	Myrta-ceae	gum trees	Tree			Used as counter cough and cold products to relieve congestion. Eucalyptus oil is also used in to relieve muscle and joint pain, and in some mouthwashes.	oil
36	*Butea monosp ermum*	Sapota-ceae	Palas Shea tree	Tree	I	396	These comprise anti-diarrheal, anthelmintic, anti-diabetic, anti-stress, hepatoprotective, antifungal, astringent, aphrodisiac, laxative, anti-inflammatory and antioxidant qualities.	leaves
37	*Cocos nucifer a L*	Arecace ae	Palm	Tree	III	09	Used as treatment of headaches, pains, rheumatism, cardiovascular diseases, arterial thrombosis and an atherosclerosis due to its rich phytonutrients.	oil
38	*Cathar anthusr oseus,*	Apocyn aceae	Sadaphuli	Shrub	II	192	antioxidant, antibacterial, antifungal, antidiabetic and	

							anticancer properties.	
39	*Hibiscus rosasinensis*	Malvaceae.	Jaswand	Shrub	I	457	treatment of diabetes and has shown antifertility activity in female Wistar rats.	flower
40	*Clitoria* ternatea	Fabaceae	Gokarn, 'Butterfly pea'	Climber	I	405	Used as ayurvedic medicine, has a memory enhancer, nootropic, antistress, anxiolytic, antidepressant, anticonvulsant, tranquilizing and sedative agent	Flower, seeds
41	*Nyctanthes arbor-tristis*	Oleaceae	Parijatak	Shrub	II	177	The popular medicinal use of this plant are anti-helminthic and anti-pyretic besides its use as a laxative, in rheumatism, skin ailments and as a sedative..	flowers
42	*Nyctanthus spectabilis*	Nyctaginaceae,	Bogainvelia	Climber			The popular medicinal use of this plant are anti-helminthic and anti-pyretic besides its use as a laxative, in rheumatism, skin ailments and as a sedative.	Leaves, flower

Conclusion:

Nowadays due to changing lifestyle and fast food became a part of our life and diseases harming our body. For preventing them we are using chemical including drugs in our body and it is also harmful to our body and affecting side effects. So the peoples need to go for the permanent solution on this serious topic. Medicinal plants are good for controlling disease without any side effects. So cultivation of medicinal plant and promoting its benefits to society is our main objective.

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POTABILITY TESTING OF DRINKING WATER AND MICROBIAL ANALYSIS OF SOIL FROM KETKAWALE VILLAGE, MAHARASHTRA, INDIA.

Prof. Dhangar U.S, Prof. S. R. Shinde, Prof. U. V. Khisti, Prof. N. N. Patil
Department of Microbiology
hanshulganeshdhangar@gmail.com

Abstract:

Ketkawali is a village situated in Purandar Taluka in Pune district Maharashtra state, India. Ketkawali village is located in Purandar tehsil of Pune district in Maharashtra, India. Ketkawali village is rich in biodiversity of soil. There is famous balaji Temple 1Km away from village from where number of floral waste coming which get buried most of the time in the soil which may help to increase soil micro flora and also nutrients. Hence the present study investigated about the microbial enrichment of soil from different agricultural land of the village. The present study also analyzed the Potability of drinking water of village, by Coliform-Test-Technique or MPN (Most probable number) method.

Keywords : Ketkawali, Water potability test, Soil, SPC, MPN.

- **Introduction:**

Ketkawali is a village which is located in Purandar tehsil of Pune district in Maharashtra, India. It is situated near sub district headquarter Saswad about 12 Km away. The Total geographical area of village is 483 hectares. Saswad is the nearest town to ketkawale for all major economic activities. As the various temples are the part of village, the famous one is pratiBalaji temple generates huge floral waste. Also many man made activities like use of chemical pesticides, fungicides, other chemicals in preservation may affect the soil health. The pollution of soil affects the health of crops ultimately all living organisms which are dependent. The analysis of soil by Standard plate Count(SPC) method will give the average number of microorganisms present in soil of different agricultural land gives the information about biodiversity as well as pathogenic and Non-pathogenic organisms present in the soil sample.(Vieira, F. C. S., & Nahas, E. (2005). Observing at microbial diversity in soil provides important insights

into the overall health and productivity of soil. The Potability testing of water was done by using most probable number (MPN) method. This method detects the presence or absence of fecal coliforms, which actually causes water contamination and makes it unsafe for human beings. Therefore quality testing of water becomes necessary to know the concentration of pathogenic coliforms i.e to check water is potable or not for drinking.

Fig.No.1: GPS location of Ketkawali village.

- **Objectives of the study:**

1. Microbial analysis of soil of different agricultural area of village.
2. Potability testing of drinking water which used in village for drinking.

- **Methods and materials**:

1. **Sample collection**:

   Soil and drinking water sample collected in the month of January 2023 from different regions of Ketkawale village, Maharashtra, Pune. The samples were

collected from top 3-4cm soil where most of the microbial activities take place. Soil samples were collected in clean, dry, and sterile polythene bags and drinking water were collected in sterile centrifuge tubes, to reduce the chances of contamination.

Sr. No.	**Sample name**	**Location**	**Elevation**
1.	Soil sample from Jwari land (SS1)	N. 18°15.678' E. 073°56.294'	721 m
2.	Soil sample from Rice land(SS2)	N. 18°15.721' E. 073°56.302'	719 m
3.	Soil sample from Maka land(SS3)	N. 18°15.814' E. 073°56.291'	722 m
4.	Soil sample from Rice 2 land(SS4)	N. 18°15.828' E. 073°56.276'	724 m
5.	Soil sample from Onion land(SS5)	N. 18°15.806' E. 073°56.299'	722 m
6.	DamWater sample	N. 18°15.773' E. 073°56.298'	718 m
7.	Well Water sample	N. 18°15.840' E. 073°56.286'	722 m

2. Bacterial count:

The individual bacterial colony was counted by standard plate count method (SPC). In this method soil samples were serially diluted by using sterile saline up to 10^{-6} to $10^{-7.}$ The diluted samples (of 10^{-6} to 10^{-7} dilutions) were spread on sterile nutrient agar plate. Incubation was done at room temperature for 24 hrs. After incubation numbers of bacterial colonies were counted by colony forming unit (C.F.U).

C.F.U = No. of colonies/ Inoculums size(ml) X Dilution factor.

3. Fungal count:

The fungal count of different soil samples was also done. Serial dilutions of soil was done by using sterile saline and then samples (of 10^{-6} to 10^{-7} dilutions) were spread on sterile Potato Dextrose Agar (PDA) plates and incubated at room temperature for 2-3 days. After incubation number of fungal colonies was counted.(Frąc, M.,et.al 2018).

4. **Potability testing of drinking water:**

The Potability testing of water was done by using most probable number (MPN) method. MPN method involves Presumptive, confirmatory and completed test. Presumptive test was done by using Mac Coneybroth(Peptone: 20g/l, lactose: 10g/l, bile salts: 5g/l, NaCl: 5g/l, Neutral red: 0.75g/l), Confirmatory test was done by using Brilliant green lactose bile broth(BGLB) and Eosin methylene blue agar medium (EMB) further positive culture from plates were inoculated in BGLB fermentation tubes and observed for gas production.

- **Result and Discussion:**

1. **Sample collection:**

Five soil samples were collected from different agricultural land and two drinking water samples were collected from the village.

Fig. 1: Sample collection.

2. **Bacterial and fungalcount:**

Standard plate count method.

CFU (Colony forming unit) was calculated by standard formula. 10^{-6} dilution plate of soil was used to calculate SPC.(Olsen, R. A., &Bakken, L. R. (1987).

$$\frac{\text{Total number of colonies on plate / Volume of sample plated}}{\text{Dilution factor}}$$

Two soil samples from the crop land were showing more number of mesophilic aerobic bacteria than other three samples. All the soil samples were showing different kind of bacterial colonies which were morphologically different and also showing different gram characters. Fungal species were also found to be observed in soil samples. One of the pathogenic species of fungi *Aspergillus spp.* was found in the soil sample of

Sr.No.	Soil sample	SPC CFU/ml	
		Bacterial count	Fungal count
1.	SS 1	$53x10^7$ CFU/ml	$2x10^6$ CFU/ml
2.	SS 2	$45x10^8$ CFU/ml	$4x\ 10^6$ CFU/ml
3.	SS 3	$115x10^7$ CFU/ml	--
4.	SS 4	$58x10^7$ CFU/ml	--
5.	SS 5	$35x10^8$ CFU/ml	$3x10^7$ CFU/ml

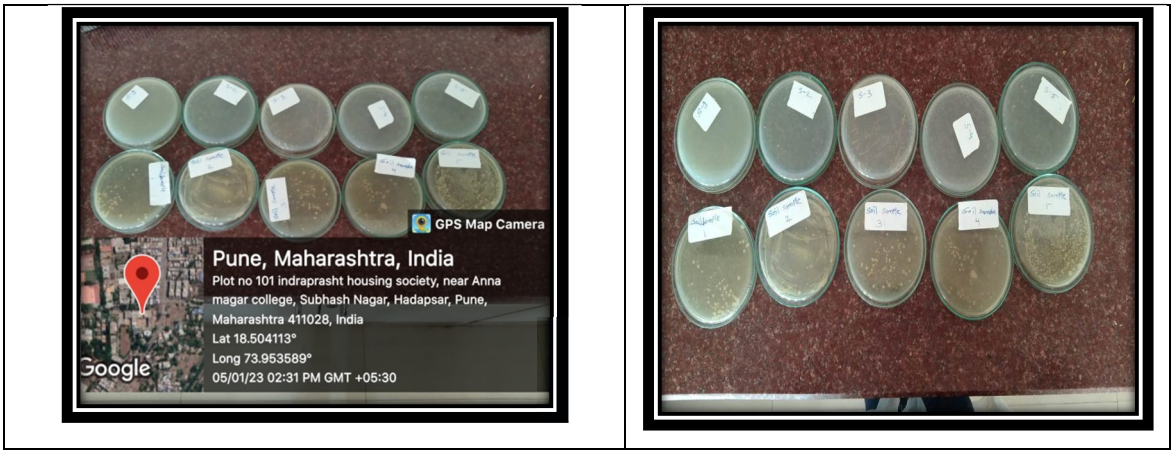

Fig.2: SPC method for bacterial count.

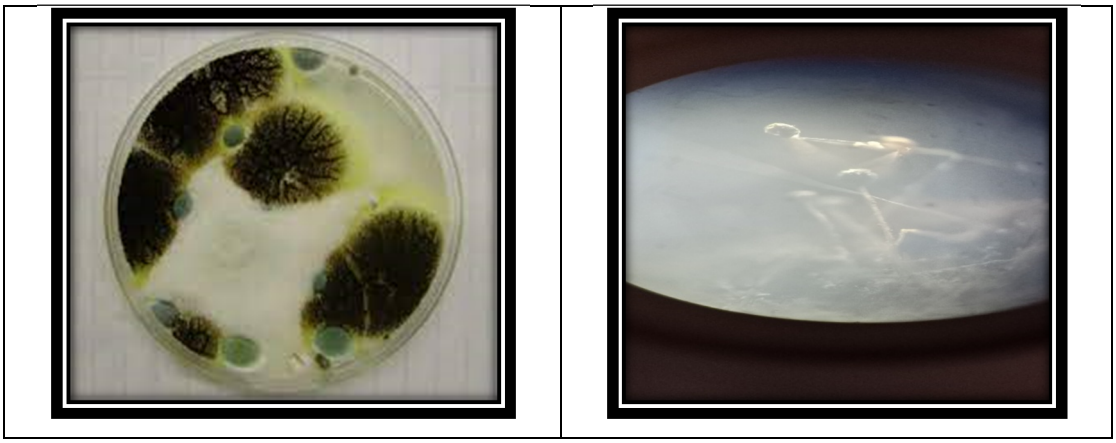

Fig. 3 SPC method for fungal count.

Soil health is the capacity of the soil to maintain environmental quality, sustain biological productivity, and promote animal, human, and plant health. In recent years the potential application of cultivating soil fungal biodiversity to improve soil quality and increase productivity of agricultural ecosystems has been mentioned as a new and very promising development in plant productivity (Bagyaraj and Ashwin, 2017),

3. **Most probable number method for Potability testing:**

MPN method was used to check Potability of two drinking water samples. No coliforms were found in both water samples. All tubes of MPN were negative shows no growth of coliforms. The results were suggesting that the drinking water samples were potable. (Ahmed, T.et al. 2013)

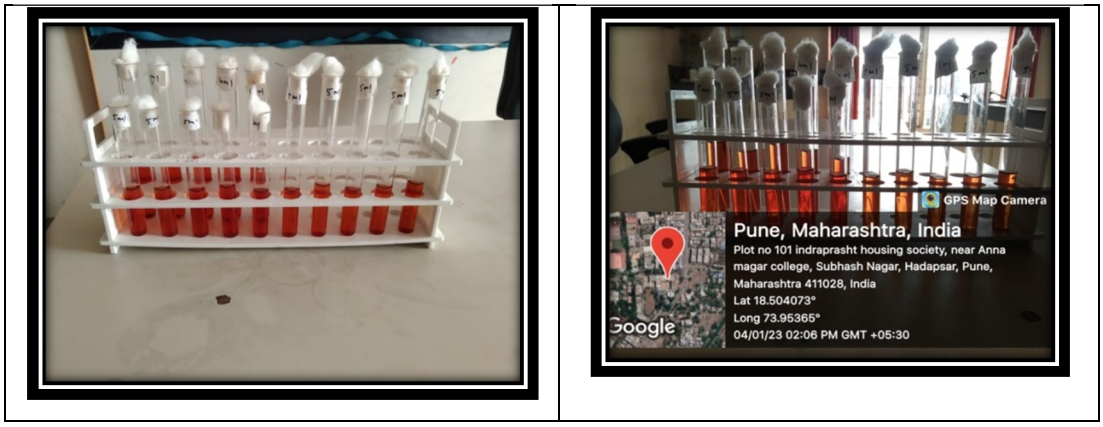

Fig.3: A) Before inoculation B) After inoculation

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SOLID WASTE MANAGEMENT AND POLLUTION ANALYSIS FROM KETKAWALE VILLAGE, MAHARASHTRA, INDIA.

Prof. Kamashetty A. O, Prof. Deshpande M. V, Prof. Khisti U. V
Department of Environmental Science

Abstract:
Ketkawale village is situated in Purandar Taluka in Pune district Maharashtra state, India. The total geographical area of village is 483 hectares. Population of the village is around 1250 peoples, out of which 627 are male and 623 are females. There is famous Balaji Temple 1Km away from village Hence the Tourist mostly attracted to visit. the present study investigated about the Solid waste management and pollution of the Ketkawale village by using questionnaires.
Keywords: Ketkawale, solid waste management, pollution.

- **Introduction:**

Ketkawale is a village which is located in Purandar tehsil of Pune district in Maharashtra, India. It is situated near sub district headquarter Saswad about 12 Km away. The Total geographical area of village is 483 hectares. Saswad is the nearest town to Ketkawale for all major economic activities. Population of the village is around 1250 peoples, out of which 627 are male and 623 are females. There are about 275 houses in village. The major Occupation of the village is agriculture, and Animal husbandry. The wastes generated in Agricultural field and domestically are manged by village itself.

- **Aims and Objectives of the study:**

- Analysis of solid waste management by questionnaires.
- Floral waste decomposition ideas .
- Pollution survey by questionnaires.
- To Create awareness among people about waste management.
- To implement new ideas of waste management such as making fertilizers from waste, and preparing natural colour from floral waste etc.
- To aware public about their local areas pollution.

- **Methodology:**

All of these surveys require a sound methodology to guide their implementers and ensure maximum validity and reliability of their findings. A clearly described survey by local people in village, allowed us to gain comparable data. A self-administered questionnaire was used to assess villagers' sources of knowledge, attitudes, and practices towards the solid waste problem. In this study, a binary scale was used. The questionnaire consisted of 18 items distributed into four dimensions: attitude (7 items), awareness (4 items), and sources of knowledge of SWM (1 item with 5 choices) and behavior / practices towards solid waste problem (6 items). Data was analyzed using the statistically.

For this survey Questionnaires were prepared according to the background of village.

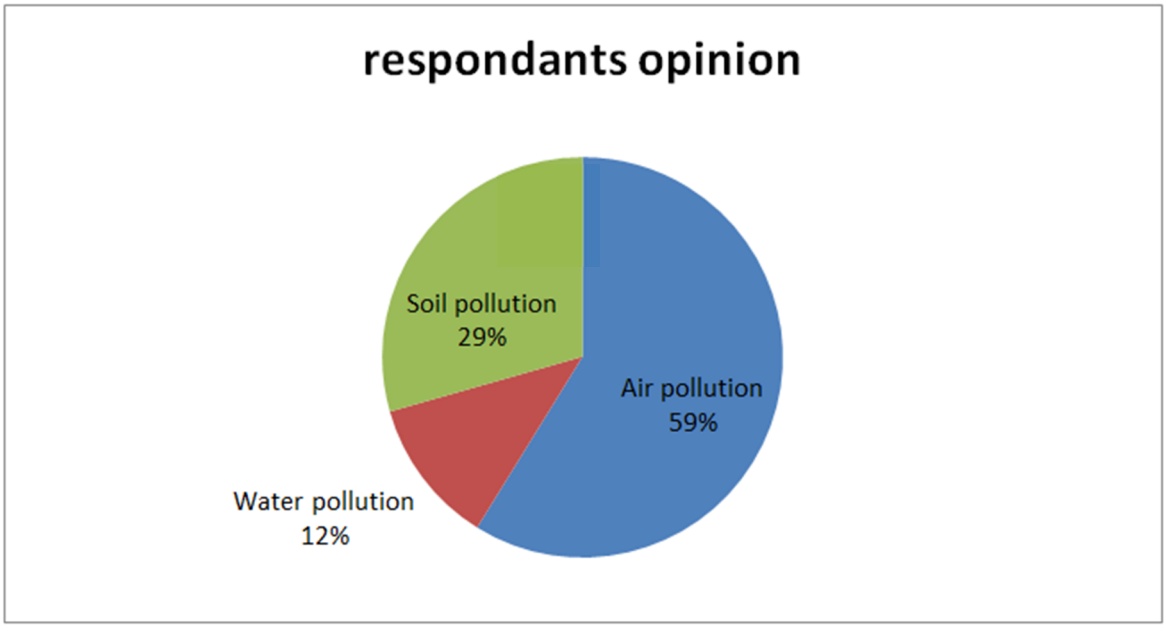
This analysis suggest that how to manage solid waste and how to control pollution occurred due to our daily activities.

➢ **Conclusion:**

According to the survey conducted in ketkawale village it is clear that improper waste management practices have a significant impact on the natural environment and sustainable development in the study area. Thus, awareness about SWM impact on environmental development or/and sustainable development in seemingly low. Therefore, it is important that the SWM should be developed from the primary level. Waste storage and primary disposal are the dominant means of managing waste. Thus, it has caused significant challenges in the study area. Therefore, waste separation from the household level, proper storage, more efficient waste collection systems, and sustainable recovery and disposal practices are identified as needed processes in the ketkawale village. Considering the nature and components of waste generated by households and business places, the waste reduction, reuse, recycling and composting processes would be more suitable in managing the challenge. These management options should be integrated in a sustainable framework. Public education and properly planned waste management programs also need to be introduced into the current waste management system. Especially awareness programmes must be conducted in order to improve the knowledge about the importance of SWM for environmental development in the village.

Result and discussion:

The results showed that 60% of the villager shad positive attitude towards this program, but however there are still 40% of them which showed negative attitude. This finding reflects the growing urgency to educate the villagers on SWM, so that they can change their negative attitude. There is still a need to educate the villagers about the problem of solid waste as this helps in raising their awareness about the problem and their support in instituting waste management measures essential to help clean the ketkawale's environment. Public support towards helping in alleviating the impacts of the problems particularly on solid waste can only be possible if the public is knowledgeable about the problem and the management goals of the government. Descriptive results also indicated that majority of the villagers showed high level of practices and behavior regarding SWM.. The transfer from attitudes to behavior can also be affected by lifestyle; many people, while professing to "correct" attitudes to the environment, are not ready to change their lifestyle in ways that might mean sacrificing certain forms of leisure and comfort for the sake of the environment. Other study has also found a weak and inconsistent relationship between environmental attitudes and behavior; usually attributable to a reluctance to give up the comforts of modern life. (Diekmann & Preisendorfer, 1998).



Acknowledgement:

We would like to thank Ketkawale villagers for providing the information regarding solid waste management and pollution analysis.

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BITOT'S SPOTS AND SCLERAL MELANOCYTOSIS OBSERVED IN PRESCHOOL CHILDREN OF KETKAWALE, M/S, INDIA.

Dr. Anju Mundhe, Ramkrishna Sutar, Dr. Sharad Giramkar
Department of Zoology

ABSTRACT:
A survey was carried out during NSS camp with the aim of observation of Bitot's spot and scleral melanocytosis among preschool children of Ketakawale. Clinical examination of 31 preschool children was carried out, WHO guidelines were followed. The data was collected and analyzed to find the prevalence of Vitamin A Deficiency (VAD). The present survey revealed the prevalence of Bitot's spots (3.7%) and scleral melanocytosis (6.35%) among the preschool children. These health issues might be due improper diet, lack of awareness about health, hygiene and hereditary disease etc. We brought parents attention to these health issues and created awareness about the importance of vitamin A among them.
Keywords: Preschool children, Vitamin A deficiency, Bitot's spots, Scleral melanocytosis, Health survey.

INTRODUCTION:

As per data from WHO, most of the world's preschool children are suffering from vitamin A deficiency (VDA) (WHO, 2009). Deficiency of vitamin A is still a major nutritional issue among the lower income countries. The VAD causes xerophthalmia, night blindness and Bitot's spots to severe corneal xerosis or sometimes complete blindness (Zekariyas Sahile et.al. 2020). This dietary nutrient should be in adequate amounts for normal vision and immunity. Vitamin A also boosts cellular growth, immunity and development (Amare Tariku et.al. 2016). VAD is prevalent in Africa where preschool students suffer from night blindness but it is four times more prevalent in South-East Asia (Zekariyas Sahile et.al. 2020). Scleral melanocytosis generally appears as two-sided spots of black to gray pigmentation in sclera (Leung AKC. 1999). The scleral melanocytosis may be nevus of Ota which is a melanosis that involves the appearance of patchy gray, blue or black discoloration of sclera to hyperpigmentation of entire area between the outer and inner layer of cornea and sclera, retina and optic nerve

(Bang P. 2015). Hence, there was an urgent need to carry out a survey of children in rural areas in Maharashtra regarding the same.

MATERIAL AND METHODS:

A health survey was carried out during NSS camp at Ketkawale (18.25973N, 7393685W) of Purandar Tehsil, M/S, India. The aim of the survey was to check health related issues in preschool children of Ketkawale. In this survey, 31 preschool children of age group 3 to 7 years were examined. Especially eyes were examined to observe Bitot's spots and scleral melanocytosis. Sub-clinical examinations were carried out by trained surveyors (Plate-1). Photographs were taken by using Sony cyber-shot DSC W230 12 MP Digital Camera with 4x Optical Zoom. Guidelines provided by WHO were followed during the survey. Data was collected and analyzed by using Microsoft Excel 2010.

RESULT AND DISCUSSION:

In this study, 31 preschool children of age group 3 to 7 years were examined. Clinical examination for Bitot's spots and scleral melanocytosis was carried out (Plate-1).

Plate-1: Clinical examination of preschool children

Plate-2: Observation of Bitot's spots in white portion of eyes.

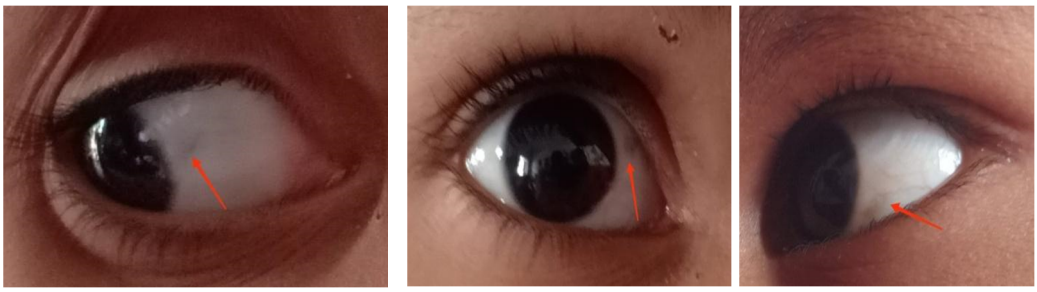

Plate-3: Observation of scleral melanocytosis in white portion of the eyes.

Bitot's spots were observed in 3.7% of preschool children. It was noted that in the conjunctiva of eyes Bitot's spots were located in the temporal portion of cornea (Plate-2). These Bitot's spots were typically keratinized spots. The lesions of Bitot's spots were dry patches not wetted by tears (Giramkar, 2021). Few of Bitot's spots appeared foamy. Bitot's spots are localized areas of xerosis; its appearance might depend on accumulation of bacteria on a site of the bulbar portion of conjunctiva of eyes (William J. Darby et. al. 1960). Presence of Bitot's spots indicates vitamin A deficiency in the population (D. W. Khandait et.al.1999; NMB 2003).

VAD is a major issue in developing countries due to malnourishment especially caused by decreased intake of pro-vitamin carotenoids. Generally young children are at high risk due to higher nutritional demands (Sharma A et al. 2014). VAD causes Bitot's spots through metaplasia of the conjunctival epithelium and it causes deposition of keratin in the stratum corneum of the conjunctiva (Umesh Krishna et. al. 2016). The foamy appearance observed in Bitot's spots in present study might be due to gas produced by gram-positive bacilli (Sommer A et al. 1981).

In present study, 6.35% of scleral melanocytosis were observed in preschool children. These were blackish gray spots observed in the scleral area of the eyes (Plate-3). The children with scleral melanocytosis were with normal vision. Scleral melanocytosis is a common gray-blue pigmentation in the scleral tissues of the eyes of children (Giramkar S. V. 2020). Histological examination of these spots shows dendritic melanocytes, it may be related to a benign condition which commonly appears in Asian ancestries (Leung AKC. 1999). The scleral melanocytosis may be nevus of Ota which is a melanosis that involves the appearance of patchy gray, blue or black discoloration of sclera to hyperpigmentation of entire area between the outer and inner layer of cornea and sclera, retina and optic nerve (Bang P. 2015).

These health issues might be due to improper diet, lack of awareness about health and hygiene etc. We brought parents attention to these health issues and created awareness about the importance of vitamin A among them.

CONCLUSION:

The present study revealed the prevalence of Bitot's spots and scleral melanocytosis among the preschool children. These health issues might be due improper diet, lack of awareness about health, hygiene and hereditary disease etc.

We brought parents attention to these health issues and created awareness about the importance of vitamin A among them. There is a need for histological examination and further study of scleral melanocytosis.

ACKNOWLEDGEMENTS:

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IMPACT OF TOURISM IN VILLAGE DEVELOPMENT WITH SPECIAL REFERENCE TO KETKAWALE (PRATI BALAJI MANDIR) TAL. PURANDAR, DIST. PUNE

Prof. Dasgupta Shilpi A. **Prof. Newaskar Revati M.**

Department of V.oc. (Tourism & Service Industries)

Introduction-

Tourism has experienced significant affects and consequences from religion over time. This is because religion has made a significant impact on the tourism industry. Especially, there are a lot of religious locations that serve as important tourist destinations. As such, it goes without saying that these two sectors are interrelated with each other as they are dependent of each other. The fact that religion has a long history is one of its finest qualities. Religion has a history that goes back at least 2,000 years. As a result, learning more about how religion has changed and evolved over time is a highly important component of tourism, which makes the history of religion quite significant. The village Ketkawale is located in Purandhar Tahsil of Pune District in the State of Maharashtra in India. It comes under Purandhar Community Development Block. The nearest town is Sasvad, which is about 12 kilometers away from Ketkawale. Ketkawale share a huge importance as religious tourism spot Prati Balaji. The goal was to examine the effects and opportunities for local development that religious tourism can have. This study indicates that religious tourism represents the region's greatest immense potential and that it can assist in the growth of other types of travel, including cultural and nature tourism.

Aims of the Study: –

Study about impact of tourism in environment, socio-economic life of the People due to the development of the Religious tourist spot (Ketkawale Prati Balaji Mandir)

Methodology:-

Secondary data like online Journal, Magazine used for detail information about area. Primary data were used to conduct the study. There are 3 ways to do it:

1. **Observation –**

   A personal observation was made of the Prati Balaji Ketkawale, the area around the

Temple, the village's facilities, and the locals' treatment of tourists.

2. **Questionnaire-**

   By using a basic random sampling technique, questionnaires were given out to persons in a range of different groups.

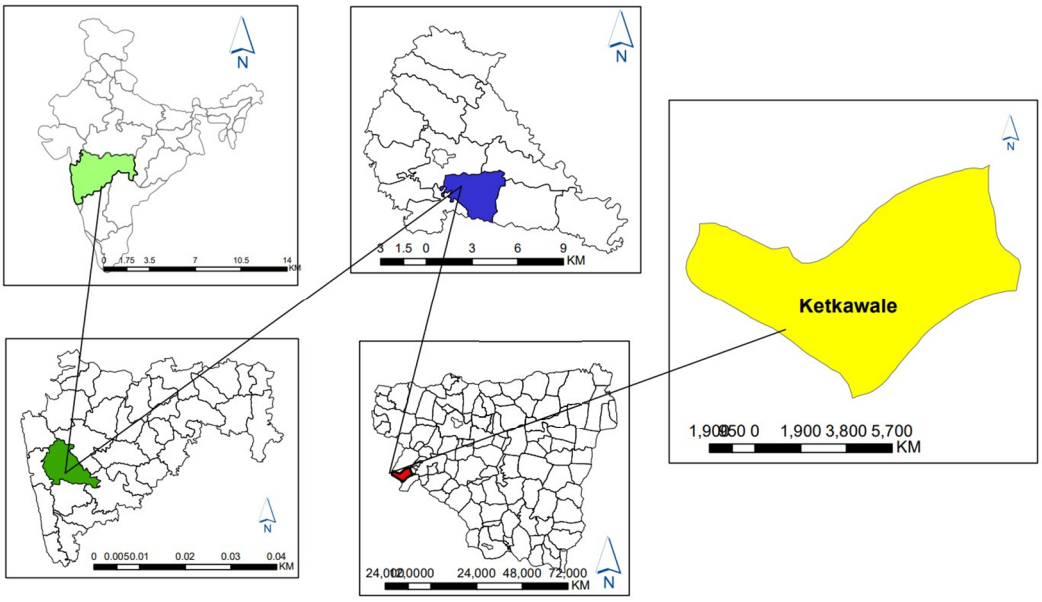
3. **Interviews –**

   some rapid interviews with residents and tourists were done. Using software like Acr-Gis for making location map.

Study area:-

The village of Ketkawale is situated in Maharashtra, India's Pune district, in the Purandhar tehsil. It is located 45km from the district headquarters in Pune and 12km from the tehsildar office in Sasvad, the sub-district headquarters. Ketkavale is the gramme panchayat of Ketkawale village, according to 2009 statistics.

The village has a total size of 483 hectares. Ketkawale settlement has roughly 275 homes. The closest town to ketkawale for all significant economic activities is Sasvad, which is located about 12 kilometres away.



STUDY AREA MAP OF KETKAWALE

Result and Discussion:-

1. **Villager Satisfaction and Dissatisfaction –**

   To better understand the circumstances of the villagers, we conducted a study. 25 houses, or 10% of the total number of houses in Ketkawale, were chosen at random. Due to their involvement in agriculture and temple work, the villagers are completely content with their income.

2. **Shopkeepers' satisfaction and dissatisfaction-**

   Shopkeepers are mostly from villages. They are satisfied with their income, and during festivals when there are more visitors, they benefit the most. For income purpose, some of the photographers travelled from other states.

3. **Tourists' Satisfaction and Dissatisfaction with Prati-Balaji Temple-**

   We employed a random sampling to acquire the visitor statistics, filling out surveys for 75 people. The majority of visitors are locals from Pune or nearby cities like Aurangabad, Mumbai, Nasik, etc.; they typically travel there for family visits and school trips. I interviewed them about the following topics:

- Accommodations: Since there were no tourist accommodations, most visitors came for just one day of darsan.
- Transportation: Although PMPML buses were available, tourists primarily used four- wheelers, two-wheelers, or private buses.
- Food and drink: The temple committee offered two free meals and made outside food available as locals worked as food suppliers.
- Restrooms: They provide clean, well-kept restrooms for men and women that are kept up to date by a trust.
- Parking: Although there are parking spaces available, the roads are poorly kept, which leads to a lot of dust pollution. Shop owners and other tourists suffer only because of this.
- Activities: The sole activities are ritualistic performances. There is no children's play area. Also, there is a location where villagers' products can be purchased locally.
- No local tour guides are provided for the temple darsan.

OBSERVATION –

Surveying is done through field visit and questioner for tourist and villagers and shop vendors.

- After develop of an area, as tourist spot villager got job and facilities for income.
- Temple and premises is well maintained by Balaji Trust and Gram panchayat.
- Developed in transportation system like development in S.T bus and PMPML buses.
- Standards of living also change.

CONCLUSION:-

- Positive environmental impact is a result of the Balaji Temple Trust's excellent care. There isn't any wet trash in the vicinity. The location is not overburdened with tourists.
- The development of the tourist destination had a favorable economic impact and the villagers were happy to find employment prospects standard of living is also developed.
- Cultural impacts were unaffected and both cultures were blooming.

Recommendation-

- Need to build cemented parking area near main entrance.
- Need to improve shoe stands near temple for old age people and handicapped person.

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THE OF STUDY THE IMPACT OF RURAL CULTURE, ENVIRONMENT AND OPPORTUNITY ON 10TH CLASS STUDENT'S CAREER PREFERENCES AT KETKAWALE VILLAGE, TAL. PURANDAR, DIST. PUNE.

Prof. Sangita M. Deokar
Department of Psychology

Introduction:-

Career selection is one of many important choices students will make in determining future plans. This decision will impact them throughout their lives. The essence of who the student is will revolve around what the student wants to do with their life-long work. Every student carries the unique history of their past and this determines how they view the world. That history created, in part by the student's environment, personality, and opportunity, will determine how students make career choices. It then follows that how the student perceives their environment, personality, and opportunity also will determine the career choices students make.

The first factor in career choice, environment may influence the students career choose. For example, students who have lived on an island may choose a career dealing with the water, or they may choose to leave the island behind, never to have anything to do with water again. Maybe someone in the student's life has made a significant impact or impression, leading to a definite career choice. Parents' educational background may influence student views on whether or not to continue their education. These are various environmental factors that would lead a student to a chosen career. How students have seen themselves in a role in which personality is a determining factor may influence a chosen career. Some careers demand that you have the personality to match the qualities of the occupation. For example, sales people have to be outgoing.

Opportunity is the third factor that has shaped career choices for students. Opportunity may influence how students have perceived their future in terms of the reasonable probability of a future in particular career fields. The issue of poverty has played an important determining role in the opportunities available to all. The income level of high school families may determine what career a student chooses during a specific

time in the student's life; choices that will determine a large part of that student's future. Some students will have to budget education according to their personal income.

Thout (1969) addressed those in desperate needs, "Where necessary, these persons [Individuals described as living under the poverty level] must be assisted through special training programs to overcome educational and social handicaps so that minimum job standards can be met". Students in many cases will need the proper mentoring Career Choice opportunities to succeed. These support groups will be another opportunity that if properly implemented, can help a student in the career choice process. The support system must have been in place and readily available for the student to utilize. The creation of support groups will have to be in place to sustain the student through times of financial, emotional, and educational need. In a dissertation by Thomas O'Brien (1996), the subjects were based on case studies of six different high school students 'interested' in enrolling into a program titled Work bound. Work bound is considered an opportunity only available to some students during their high school experience.

Students traditionally stay at home to either obtain education or start employment. Tuchel mentioned that marriage also played a large part in career decisions. She stated that the economics of marriage either solidified the commitment to go on to higher education or stopped career plans short, depending on the stability of the marriage (B.J.Tuchel, personal communication, June 18, 2002).

For clarity the terms used in the study were defined as follows: Career choice – The broad opportunities that exists for life long vocations. These vocations are set out in a framework of strategies moving toward personal goals. Fields of vocational, academic, and sociological endeavors are explored for the purpose of satisfying personal, economic, and intellectual goals. Environment – The complex physical factors that make up our surroundings (Britannica, 2002), and in turn act upon us. For the purposes of this study they would include the forces of family, political, social, and economic issues that both typical and non-typical students may deal with on a day-to-day basis.

Operational Definition of Technical Term Career Preference:- In this study the career preference means score of different career fields which the researcher has obtained by using the tool 'Career Preference Record' (CPR) developed by Dr. Vivek Bhargava and Rajshree Bhargava.

Aims and objectives :

The main objective of conducting these test is to enable 10th class students to identify careers they can excel into analyzing their strengths and weakness, likes and dislikes, interests and disinterests, skills and competencies.

The study's significance of the study includes the following:-

1) Some students do not begin to explore 'real' career possibilities until after high school graduation. Technical colleges might more aggressively inform students earlier in their schooling, of information, knowledge, and skills they could apply to their daily studies.
2) Some students do not seriously consider many alternative choices in career selection. Sources of influence, such as parents or mentors, could be brought into a circle of counseling and discussion to help the student form a comprehensive career plan or outline.
3) Industry could see where, why, and when it could be beneficial for them to invest resources for the purpose of training, while still in technical schools.
4) If career planning were done in an efficient manner, students would at the very least be following a career plan of informed decision-making, rather than one of happenstance. The researcher will analyze the collected information and identify any existing trends. In addition, he will suggest and explore implications and recommendations.

Methodology:-

Research method is to conduct a research work, which is determined by the nature of problem. For the present study Descriptive Survey, method has been used.

Variable:-

1. **Independent variable:**
   Students cultural background, Environment and opportunity.
2. **Dependent variable:**
   Career Preference Sample a sample of 58 students was drawn from Adharsh Madhyamik Vidyalay Ketkawale village of Pune District.

Tool :

The standardized tool used is 'Career Preference Record' (CPR) which was developed by Dr. Vivek Bhargava & Rajeshree Bhargava (Agra) in the year 2001. It published by 'Haraprasad Institute of Behavioral Studies' (HIBS), AGRA.

Result and Discussion:-

Sr. No.	Career Choice	Number of students selected career
1.	Education	5
2.	Artistic and Designing	9
3.	Defense	19
4.	Mass Media and Journalism	1
5.	Science and Technology	7
6.	Medical	5
7.	Agriculture	4
8.	Commerce & Management	1
9.	Law and order	7
10.	Tourism and Hospitality	0
Total = 58		

Discussion:-

It is observe that rural culture, environment and opportunity make impact on students career preferences, while communicate with students, many of them students told that we can't afford highly professional or expensive career due to lack of money. Students give preference to many traditional career, because they don't know the modern career option, they are unaware about government schemes for higher education. Student's parents are less educated or illiterate, therefore they also not give them guidance for career. Mentor system is not available at their school therefore students can't aware about modern career option.

Conclusion:-

After administration of career preference test on 10^{th} class students of high school of Ketkavale Village, it is found students selected following main career options for themselves that is defense career field selected by 19 students, Law and order by 7, Science and technology by 7, artistic and designing selected by 9, education and medical by 5, agricultural by 4, mass media and journalism by 1, commerce and Management by 1, Tourism and Hospitality by 0 .

Limitations:-

Sample size for this study is too small only one high schools 10th class is included in this study that's why we can't generalize this study results.

Recommendation:-

1. Students do not know many modern career options. E.g. Tourism & Hospitality industry, Mass Media and Journalism.
2. Surrounding of students can make impact on their career choices therefore many students select traditional career option.
3. It needs to introduce students to new career options so they will choose an out of box career field, which will be better for their future growth.
4. After communicating with the students they said that if they choose a high profile career option (e.g. Medical, Engineering) their parent can't borrow expenses of that education therefore it's needed to be introduce to them with various scholarship and hostel facility because many students are from reserve categories.
5. Mentor system should introduce effectively so it is help students for further guidance.

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''केतकावळे गावाचा शेतीपूरक व्यवसायाचा आर्थिक आणि सामाजिक प्रगतीचा अभ्यास''

प्रा. अक्षय विपीनचंद्र उगीले
वाणिज्य विभाग

संशोधन परिचय :

केतकवळे हे भारतातील महाराष्ट्र राज्यातील पुणे जिल्ह्यातील पुरंदर तालुक्यातील एक गाव आहे. हे उपजिल्हामुख्यालय सासवडपासून १२ किमी अंतरावर आहे. केतकवळे हे महाराष्ट्रातील पुणे जिल्ह्यातील पुरंदर तालुक्यातील एक मध्यम आकाराचे गाव असून येथे एकूण २७५ कुटुंबे राहतात. केतकवळे गावाची लोकसंख्या १२५० असून २०११ च्या जनगणने नुसार ६२७ पुरुषतर ६२३ स्त्रिया आहेत. महाराष्ट्राच्या तुलनेत केतकावळे गावात साक्षरतेचे प्रमाण कमी आहे. २०११ मध्ये केतकवळे गावचा साक्षरतेचा दर ८१.८८% होता, तर महाराष्ट्राचा साक्षरतादर ८२.३४% होता. केतकावळे येथे पुरुष साक्षरता ९०.४८% तर स्त्री साक्षरता ७३.४८% आहे.

संशोधन विधान:

केतकवळे गावाचा शेतीपूरक व्यवसायाचा आर्थिक आणि सामाजिक प्रगतीचा अभ्यास.

संशोधनाची उद्दिष्टे :

- केतकवळे गावातील शेतीपूरक व्यवसायाची माहिती अभ्यास करणे.
- केतकवळे गावातील गाव कऱ्यांच्या आर्थिक परिस्थितीचा अभ्यास करणे.
- केतकवळे गावातील गाव कऱ्यांच्या सामाजिक प्रगतीचा अभ्यास करणे.

गृहीतके:

- कृषी पूरक व्यवसायामुळे शेतकऱ्यांच्या आर्थिक परिस्थितीमध्ये सुधारणा होते.
- कृषी पूरक व्यवसायासाठी शासन करीत असलेल्या मदतीचा सर्व शेतकऱ्यांना लाभ मिळत नाही.

संशोधनाची गरज:

भारत हा कृषिप्रधान देश असून भारतातील ७० टक्के जनता शेतीवरच अवलंबून आहे. भारतीय शेतकरी हा अशिक्षित असून त्यांची शेती करण्याची पद्धत ही परंपरागत आहे त्यामुळे त्यांच्या शेतीची उत्पादकता कमी असल्याचे आपणास दिसून येते. भारतीय शेतकरी हा परंपरेने शेती करीत असताना तो व्यवसायिक दृष्टीने आजही शेतीकडे पाहत नाही. त्यामुळे शेतकऱ्यांचे उत्पन्न कमी असून त्यांची आर्थिक परिस्थिती बेताची

असल्याची आपणास दिसून येते. जी परिस्थिती भारतात, महाराष्ट्रात आहे तीच परिस्थिती पुणे जिल्ह्यातील केतकावळे गावात असल्याचे दिसून येते. आज काही शेतकरी शेतीपूरक व्यवसायाकडे वळत आहेत, ज्यामुळे त्यांच्या आर्थिक उन्नती मध्ये वाढ होताना दिसून येत आहे तेव्हा अशा शेतीपूरक व्यवसायामुळे शेतकऱ्यांच्या आर्थिक उन्नती मध्ये वाढ होत आहे का? शेतीपूरक व्यवसायाचे कसे महत्त्व आहे हे इतर शेतकऱ्यांच्या समोर आणून त्यांना शेतीपूरक व्यवसायाकडे कसे वळवता येईल याचा प्रयत्न या संशोधनाच्या माध्यमातून येथे करण्यात येणार आहे.

संशोधनाचे महत्त्व:

शेती हे भारतीय अर्थव्यवस्थेतील एक महत्त्वाचे क्षेत्र आहे. देशातील सुमारे ५९ टक्के लोकसंख्या शेती क्षेत्रावर प्रत्यक्षपणे अवलंबून आहे. भारतीय अर्थव्यवस्थेत शेती व्यवसायाचे महत्त्व अन्नधान्य पुरवठा उद्योगधंद्यांना लागणारा कच्चा व आंतरराष्ट्रीय व्यापाराच्या दृष्टीने अनन्य साधारण असे आहे. भारतात सर्वात जास्त रोजगार उपलब्ध करून देणारा व्यवसाय म्हणजे शेती होय परंतु भारतातील शेती ही मोसमी पावसावर अवलंबून असल्यामुळे कधीही जास्त पावसामुळे शेतीचे नुकसान होते तर कधी कमी पावसामुळे शेतीचे नुकसान होते त्यामुळे शेतकरी हा आर्थिक संकटात सापडतो व त्याच्या दैनंदिन गरज सुद्धा तो पूर्ण करू शकत नाही. शेती या व्यवसायावर जास्त लोक अवलंबून असल्यामुळे त्याही लोकांना या दुष्काळाची झळ नेहमी पोहोचत असल्याचे दिसून येते. शेतकरी हा केवळ शेतीवरच अवलंबून न राहता इतरही शेती पूरक व्यवसाय केला पाहिजे ज्यामुळे त्यांना अशा संकटाचा सामना करणे कठीण जाणार नाही, आज शेतकरी विविध शेतीपूरक व्यवसायांकडे वळत आहे त्याचा फायदा ही त्या लोकांना होत आहे. तेव्हा या शेतीपूरक व्यवसायामुळे शेतकऱ्यांच्या आर्थिक उन्नती मध्ये कशा पद्धतीने सुधारणा होत आहे हे शोधण्याचा प्रयत्न या संशोधनाच्या माध्यमातून करण्यात आला आहे शेती पूरक व्यवसाय शेतकऱ्यांना कशा पद्धतीने फायदेशीर ठरते व त्यामुळे त्यांचे आर्थिक प्रगती कशाप्रकारे होऊ शकते हे या संशोधनातून अभ्यासण्यात आले आहे.

संशोधनाची मर्यादा:

प्रस्तुत संशोधनामध्ये केतकवळे गावाचा शेतीपूरक व्यवसायाचा आर्थिक आणि सामाजिक प्रगतीचा अभ्यासया विषयाचा अभ्यास करत असताना पुणे जिल्ह्यातील पुरंदर तालुक्यातील केतकवळे या गावा पुरते मर्यादित संशोधन करण्यात आले आहे.

संशोधन पद्धती:

प्रस्तुत संशोधनासाठी प्राथमिक सामग्रीचा आधार घेण्यात आला आहे. प्राथमिक साधनांमध्ये प्रत्यक्ष शेतीपूरक व्यवसाय करणाऱ्या शेतकऱ्यांकडे जाऊन अनुसूचीच्या सहाय्याने माहिती संकलित करण्यात आली आहे.

क्रमांक	प्रश्नाचे स्वरूप	हा	नाही	हा	नाही
१	हंगामी स्वरूपाचे शेतीचे उत्पन्न	९२	५	९४.८५%	५.१५%
२	शेतीपूरक व्यवसायामुळे आर्थिक प्रगती	६७	३०	६९.०७%	३०.९३%
३	आर्थिक प्रगतीमुळे सामाजिक समतोल	५८	३९	५९.७९%	४०.२१%
४	सामाजिक व आर्थिक जीवनमान	६०	३७	६१.८६%	३८.१८%

निष्कर्ष:

- केतकावळे गावातील शेतीचे उत्पन्न हे ९४.८५% हंगामी स्वरूपाचे घेतले जाते, कारण बारमाही पाणी उपलब्ध नाही.
- शेतीपूरक व्यवसायामुळे ६९.०७% आर्थिक प्रगती साधली जात आहे.
- आर्थिक प्रगती मुळे ५९.७९% सामाजिक समतोल साधला जात आहे.
- ६१.८६% नोकरी व पूरक व्यवसायामुळे सामाजिक व आर्थिक जीवनमान हे काळानुसार उंचावत आहे.

''केतकावळे गावातील हवामान बदलाचा शेती क्षेत्रावर होणाऱ्या परिणामांचा अभ्यास''

प्रा. खरात प्रज्ञा दगडू **प्रा. पोतदार पी. आर.**

अर्थशास्त्र विभाग

प्रस्तावना:

जगातल्या अनेक देशासमोर हवामान बदल हे मोठे आव्हान आहे. हवामान बदल आणि हवामानातीलविचलन याचा वनस्पती, प्राणी, नैसर्गिक साधनसंपत्ती यावर तसेच मानवी जीवनावर परिणाम होत आहे. प्रदेशानुसार आणि काळानुसार हवामानात बदल होत असतो. वातावरण नेहमी अस्थिर आणि क्षोभ निर्माण करणारे असल्यामुळे हवा आणि हवामानाच्या स्थितीत भिन्नता निर्माण होते आणि हवामान बदल घडून येतो.तापमानात वाढ होणे, ऋतुचक्र बदलणे, त्यामध्ये अनियमितता निर्माण होणे यासंबंधी हवामान बदल ही संकल्पना संबंधीत आहे. जागतिक तापमानवाढ ही हवामान बदलाचा स्पष्ट जाणवणारा परिणाम आहे.

सन १९८० नंतर किमान सहा वेळा उबदार तापमानाची वर्षे अनुभवण्यात आली. जगातील शास्त्रज्ञ आय.पी.सी.सी.च्या माध्यमातून स्पष्ट करतात की, हवामान बदल रोखणे आणि समायोजन दोहोंवर तेवढाच भर दिला तर आपत्तीपासून होणारी हानी कमी करता येईल. हवामान बदलला सामोरे जाण्यासाठी त्याचे एक विशेष खाते असणे गरजेचे आहे. जागतिक हवामान बदल होत आहेत असा पर्यावरणवाद्यांचा कयास होता. इंटरनॅशनल पॅनल क्लायमेट चेंजच्या अहवालाने जगातील १३०० वैज्ञानिकांनी जागतिक हवामान बदलाचा सखोल अभ्यास केला. संयुक्तराष्ट्र संघाशी असणाऱ्या या समितीचा पाचवा अहवाल मार्च २०१४ मध्ये प्रसिद्ध झाला. त्यात त्यांनी जगाला इशारा दिला की, हवामान बदलाचा धोका जगातील सर्वाना सारखाच आहे. तेव्हा हवामान बदलाचे धोके लक्षात घेऊन त्यांच्याशी जुळवून घेत शेतीचे नियोजन व समायोजन करणे गरजेचे आहे.

भारतीय अर्थव्यवस्था कृषिप्रधान असून शेती हा भारतीय अर्थव्यवस्थेचा कणा आहे. पर्जन्यवृष्टीच्या बदलेल्या स्वरूपाचा परिणाम भारतीय शेती क्षेत्रावर पाहायला मिळतो. कारण भारतीय शेती क्षेत्र हे त्या त्या भागातील हवामानाच्या स्थितीवर आधारित आहे. हवा म्हणजे कोणत्याही एका विशिष्ट ठिकाणची विशिष्ट वेळेची हवामानाची स्थिती होय. पावसाळा काही वर्षी खूपच अधिक तर काही वर्षी खूपच कमी अथवा कोरडा झाल्याने पिकांच्या वाढीवर परिणाम झाला आहे. बदलत्या हवामानाचा परिणाम म्हणजे पर्ज्यन्याची तीव्रता वाढली व त्यामुळे पावसाचे दिवस कमी झाले. हवामान बदलाचा परिणाम पावसाळ्यात दुष्काळ किंवा अतिवृष्टी आणि महापूर, हिवाळ्यात ढगाळ हवामान आणि अवकाळी पाऊस तर उन्हाळ्यात गारपीट होते. त्याचा परिमाण त्या त्या हंगामातील पिके आणि पीक पद्धतीवर होतो. भारतासारख्या कृषिप्रधान देशात तर हवामानशास्त्र व शेती यांचा घनिष्ट संबंध आहे. पिकांची पेरणी, मशागत, मळणी यासाठी हवामानाच्या ज्ञानाची नितांत आवश्यकता असते. कोणत्या हंगामात कोणती पिके घ्यावी, गारपीट, धुके, आवर्षण, अतिवर्षण अशा

परीस्थितीत कोणत्या उपाययोजना कराव्यात, यासाठी हवामानशास्त्राची मदत घेतली जाते. तसेच हवामानाच्या पुर्वानुमानामुळे (Weather forecasting) शेती क्षेत्रातील होणारी हानी टाळता येणे शक्य झाले आहे.

प्रस्तुत संशोधन पुरंदर तालुक्यातील केतकावळे गावातील असून येथील सर्वसाधारण हवामान उष्ण व कोरडे आहे. हवामानातील बदलानुसार प्रत्येक वर्षात मुख्यत: तीन ऋतू असतात. मार्च ते मे पर्यंत उन्हाळा, जून ते ऑक्टोबर पर्यत पावसाळा आणि नोव्हेंबर ते फेब्रुवारी पर्यंत हिवाळा असतो. तालुक्यातील वार्षिक सरासरी पर्ज्यन्यमान ५०० मिमी पर्यंत असते.

हवामानशास्त्राची व्याख्या:

हवामानशास्त्रास इंग्रजीमध्ये 'Climatology' असे म्हटले जाते. शब्दांच्या उत्पती शास्त्रानुसार ग्रीक भाषेतील 'Klima' क्लाइमा या शब्दाचा अर्थ म्हणजे पृथ्वीचा उतार होय. ॲरिस्टॉटलनेक्लाइमाचा उपयोग अक्षवृत्त म्हणून केला होता. पृथ्वी गोलाकार असल्याने अक्षवृत्तानुसार हवामान बदलते. म्हणून 'Klima' क्लाइमा म्हणजे बदलते हवामान व Logos लोगस म्हणजे अध्ययन किंवा शास्त्र होय. म्हणून Klima + Logos = Climatology क्लाईमॅटोलॉजी म्हणजे पृथ्वीवरील बदलत्या हवामानाचे अध्ययन किंवा शास्त्र होय. क्लाइमा या शब्दावरूनच क्लाएमेट हा इंग्रजी शब्द हवामानासाठी प्रचलित आहे.

१) **कोपेन व डीलॉग व्याख्या :**

हवामान व त्याची विविध अंगे त्यांच्या वितरणावर परिणाम करणारे घटक तसेच प्रत्यक्ष त्या घटकांचे प्रादेशिक वितरण स्पष्ट करणे म्हणजे हवामानशास्त्र होय.

२) **डब्लू.जी.मूर व्याख्या:**

पृथ्वीवरील विविध प्रकारचे हवामान व त्यांचा नैसर्गिक पर्यावरणावर होणारा परिमाण यांचा अभ्यास करणारे शास्त्र म्हणजे हवामानशास्त्र होय.

संशोधन पद्धती:

प्रस्तुत संशोधन हे पुणे जिल्ह्यातील पुरंदर तालुक्यातील केतकावळे गावातील संशोधन विषयाच्या अनुषंगाने निवडले आहे. प्रस्तुत संशोधन प्राथमिक व दुय्यम स्त्रोतांद्वारे माहितीचे संकलन केले आहे.

संशोधन अभ्यासाची उद्दिष्टे आणि ध्येय:

१) केतकावळे गावातील हवामान बदलाचा शेतकऱ्यांच्या आर्थिक जीवनावर झालेल्या परिणामांचा अभ्यास करणे.

२) केतकावळे गावातील पीक रचनेत झालेल्या बदलाचा अभ्यास करणे.

३) केतकावळे गावातील हवामान बदलाचा शेती उत्पादनावर व उत्पन्नावर झालेला परिणाम अभ्यासणे.

प्राथमिक स्त्रोत:

मुलाखत अनुसूची, निरीक्षण, चर्चा इत्यादींच्या माध्यमातून केतकावळे गावातील हवामान बदलाचा परिणाम शेती क्षेत्रावर व शेतकऱ्यांच्या आर्थिक व सामाजिक परिस्थितीचा अभ्यास केला आहे.

दुय्यम स्त्रोत:

प्रस्तुत संशोधन विषयाची अधिक माहिती मिळविण्यासाठी शोधनिबंध, प्रबंध, संदर्भ पुस्तके, वेबसाईट इत्यादींचा वापर केला आहे.

मर्यादा :

प्रस्तुत संशोधन विषयाची मर्यादा पुरंदर तालुक्यातील केतकावळे गावातील शेतकऱ्याच्या अभ्यास विषयापुरती मर्यादित आहे.

निरीक्षण आणि सर्वेक्षणातील मुद्दे :

१) केतकावळे गावातील २०११ च्या लोकसंख्या जनगणनानुसार एकूण १२५० लोकसंख्या होती पुरुषांची लोकसंख्या ६२७ तर स्त्रियांची लोकसंख्या ६२३ होती.

२) केतकावळे गावातील २०११ च्या लोकसंख्या जनगणनानुसार एकूण लोकसंख्येपैकी ९०४ लोक साक्षर आहेत. ४९४ पुरुष साक्षर आहेत तर ४१० स्त्रिया साक्षर आहेत. ३४६ लोक निरक्षर आहेत १३३ पुरुष तर २१३ स्त्रिया निरक्षर आहेत.

३) केतकावळे गावातील शेतीचे क्षेत्र ४८३ हेक्टर असलेले दिसते.

४) केतकावळे गावात ६०% लोकसंख्या शेती हा प्रमुख व्यवसाय करतात. व्यवसाय करणारे २५% लोकसंख्या आहेत. नोकरी १५% लोकसंख्या करतात असे दिसते.

५) केतकावळे गावातील शेतीचे उत्पादन ६२% पावसाच्या पाण्यावर अवलंबून असलेले दिसून आले. विहिरीच्या पाण्यावर २३%, बोअरवेल व इतर पाण्यावर १५% शेतीचे उत्पादन अवलंबून असलेले दिसते.

६) केतकावळे गावातील ५५% शेतकरी हवामानानुसार पीक नियोजन करतात. इतर ४५% शेतकरी हवामानानुसार पीक नियोजन करत नाही असे दिसून आले.

७) केतकावळे गावातील शेतीचे तुकडे झालेले दिसून आले, ५७% शेतकरी हे कमी धारणक्षेत्र असलेले दिसतात त्यांच्याकडे २.५ एकर पेक्षा कमी शेती असलेली दिसते.

८) केतकावळे गावातील शेतकरी ज्वारी, बाजरी, भात शेती, मका, अंजीर, पेरू इत्यादी पिके घेतात्त.

९) जानेवारी २०२० दुष्काळानंतर पावसाने चांगली साथ दिली परंतु त्यामुळे रब्बी हंगामात डोंगराळ व जिरायत भागात ज्वारीची लागवड करण्यात आली. मात्र हवामानातील बदलामुळे त्यावर रोगाचा प्रादुर्भाव झाला.

१०) पुरंदर तालुक्यात अंजीर या फळाचे उत्पादन घेतले जाते. हवामान बदलामुळे अंजीरचे पीक आर्थिकदृष्ट्या अडचणीत सापडले आहे असे दिसून आले. त्या तुलनेत देखभाल खर्च कमी, व्यवस्थापनेला सोपे असलेल्या पेरू पिकाचा हुकमी पर्याय शेतकऱ्यांना सापडलेला आहे. तसेच मुंबईचे मार्केट उपलब्ध झाल्याने पेरू उत्पादकांची सोय होत असलेली दिसते.

११) अंजीर उत्पादनाला पर्यायी पीक बदल पेरूच्या पिकात झालेले दिसते.

१२) २०१९ च्या अतिवृष्टीमुळे पिकाचे नुकसान झालेले. २०२० मध्ये पावसाने साथ दिलेली परंतु ज्वारीच्या पिकावर तांबोरा व चिकटा रोगांचा प्रादुर्भाव झाल्याने पीकाचे नुकसान झाले. त्यामुळे शेतकऱ्यांचे आर्थिक नुकसान झालेले दिसून येते.

निष्कर्ष:

- बदलत्या हवामानामुळे या भागातील कृषी उत्पादनात घट होत आहे असे दिसून आले.
- पावसाळा लांबलेला यामुळे बहुतेक वेळा दुबार पेरणीची वेळ येते. म्हणून शेती करणे परवडत नाही.पीक भरघोस येत नाही असा परिणाम दिसून येतो.
- केतकावळे गावात ज्या ठिकाणी पाणी मुबलक प्रमाणात आहे तेथे पाण्याचे योग्य नियोजन नाही असे दिसते.
- अवकर्षण आणि अवकाळी पावसाविषयी सरकारी योजना राबवल्या जातात त्याविषयी शेतकऱ्यांना कोणतीही माहिती उपलब्ध नाही असे दिसून आले.

शिफारशी:

हवामान बदलाचा समर्थपणे सामना करण्यासाठी काही शिफारशी सुचविता येतील.

- कृषी संशोधनाची दिशा बदलने गरजेचे आहे. २००३ पासून पावसाचे अंदाज वर्तविले जात आहेत. पण ते पुरेसे नाही.
- संरक्षित शेती करणे गरजेचे आहे. कमीत कमी नुकसान होणाऱ्या पिकांच्या उत्पादनाची आखणी करावी.
- स्थानिक पातळीवर जलव्यवस्थापन केले जावे ज्यामुळे भूजलपातळीव पावसाच्या पाण्याचे नियोजन करता येईल.
- पाणलोट विकास व तंत्रज्ञानातून हवामान बदलावर मात करता येणे शक्य आहे. ज्यामुळे भाजीपाला लागवड करता येईल.
- स्वयंचलित हवामान यंत्रांची मोठ्या प्रमाणातगरज आहे. साबळे मॉडेल, किसान पोर्टेल याप्रमाणे यंत्रे विकसित केली जावी.
- हवामान बदलाचे गांभीर्य लक्षात आणून देण्यासाठी सामान्यजनांपर्यंत त्यांचे दुष्परिणाम व उपाययोजना पोहचविण्यात याव्या.

वरील सर्व उपायांची अंमलबजावणी केल्यास काही प्रमाणात का होईना हवामान बदलांचा सामना करणे शक्य होईल व ग्रामीण अर्थव्यवस्थेला हवामान बदलांच्या धोक्यापासून सुरक्षित ठेवता येईल. ग्रामीण क्षेत्रे सुरक्षित तर देश सुरक्षित व अर्थव्यवस्था सुरक्षित राहील.

संदर्भसूची:

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२. आगलावे प्रदीप, संशोधन पद्धतीशास्त्र व तंत्र, विद्या प्रकाशन नागपूर.

३. कृषी भूगोल (gricultural Geography) - डॉ.अरुण राजाराम कुंभारे पायल पब्लिकेशन, पुणे.

४. जागतिक हवामान बदल अहवाल - २०१२

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६. हवामानशास्त्र (Climatology)- डॉ.डी.एच.चौधरी, डॉ.सतीश जाधव चिन्मय प्रकाशन, औरंगाबाद.

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''केतकावळे गावातील महिलांचा राजकीय प्रक्रियेतील सहभाग''

प्रा. गायकवाड शीतल सदाशिव
राज्यशास्त्र विभाग

आजच्या आधुनिक जगात लोकशाही ही सर्वात लोकप्रिय शासनपद्धती म्हणून ओळखली जाते. भारताची ओळखही जगातील एक मोठा लोकशाही देश म्हणूनच करून दिली जाते. लोकशाहीची भारतातील प्रक्रिया जरी ब्रिटिशांच्या काळातच सुरू झालेली असली तरी तिचा खऱ्या अर्थाने प्रारंभ १९४७ नंतरच झाला.राजकीयदृष्ट्या लोकशाहीधारक बनल्यानंतर भारताची सामाजिक आणि आर्थिक लोकशाहीच्या दिशेने वाटचाल सुरु झाली.

राजकीय लोकशाही स्थापनेचा महत्वाचा निकष म्हणजे निवडणुकीच्या प्रक्रियेत (प्रतिनिधित्व आणि मतदान) सहभागी होण्याचा सर्वांना समान हक्क (कोणत्याही भेदभावाशिवाय) देणे होय. राजकीय सहभागाची सर्वांना समान संधी उपलब्ध करून देणे होय. सामाजिक आणि आर्थिक लोकशाही म्हणजे या राजकीय हक्कांचा वापर करता येईल अशी सामाजिक आणि आर्थिक परिस्थिती निर्माण करणे होय. आपण राजकीय लोकशाही स्वीकारली आहे पण राजकीय लोकशाही टिकवण्यास हातभार लावणाऱ्या सामाजिक आणि आर्थिक लोकशाही निर्मितीत यशस्वी ठरलो आहोत का हे पाहणे ही अत्यावश्यक ठरते. लोकशाहीचे यश आणि अपयश तपासण्यासाठी लोकशाहीच्या राजकीय, आर्थिक, सामजिक आयामांचा अभ्यास करणेही आवश्यक ठरते.

या संशोधन लेखात याच सामाजिक लोकशाहीच्या अनुषंगाने पुणे जिल्ह्यातील पुरंदर तालुक्यातील 'केतकावळे गावातील महिलांचा राजकीय प्रक्रियेतील सहभाग' या विषयावर संशोधन करण्याचा प्रयत्न केला आहे. यात गावातील स्थानिक राजकारण, प्रादेशिक, देशीय राजकारण, निवडणूक प्रकियेत महिलांच्या सहभागाचे प्रमाण कसे आहे, महिला सहभागास आवश्यक पोषक परिस्थिती उपलब्ध आहे का ? ती असल्यास किंवा नसल्यास त्या मागे कोणती कारण आहेत, हे शोधण्याचा प्रयत्न प्रस्तुस्त अभ्यासात केला गेला आहे. या संशोधनासाठी सामाजिक सर्वेक्षण, वर्णनात्मक आणि गुणात्मक, तुलनात्मक आणि विश्लेषणात्मक संशोधन पद्धतींचा अवलंब करण्यात आला आहे. हे संशोधन स्त्रीवादी परिप्रेक्ष्यातून करण्याचा प्रयत्न केले आहे. संशोधनाचा प्रमुख हेतू केतकावळे गावातील राजकीय प्रक्रियेतील महिलांच्या सहभागाचा चिकित्सक अभ्यास हा होता. माहितीचे संकलन करण्यासाठी प्राथमिक स्त्रोत (निरीक्षण, मुलाखत, प्रश्नावली) व दुय्यम स्त्रोत (विविध शासकीय निर्णय, वृत्तपत्रीय लेख, स्त्री प्रश्न हाताळणारी मासिके, पुस्तके) यांचा वापर केला आहे.

लोकशाही संकल्पनेच्या दिवसोंदिवस होत असलेल्या विस्तारामागे लोक या संकल्पनेचा झालेला विकास कारणीभूत ठरला आहे. पूर्वी लोक ही संकल्पना समाजातील उच्च वर्गीय आणि ते ही पुरुष यांच्यापुरतीच सीमित होती. कालानुरूप तिचा विस्तार होत जाऊन त्यात कृष्णवर्णीय, गुलाम, कनिष्ठ जाती म्हणजे दलित व आदिवासी, महिला अशा अनेक वंचित घटकांचा समावेश झाला. त्यांच्या हक्कांविषयीही बोलले जाऊ लागले. भारताने स्वातंत्र्य प्राप्तीनंतर पुरुषांप्रमाणेच महिलांनाही सर्व राजकीय हक्क कोणतीही खळखळ न करता मिळवून

देण्याचे धोरण अंगिकारले. प्रत्यक्षात हा हक्क स्त्रियांना किती प्रमाणात वापरता येतात याचा शोध घेतल्यास आपल्याला नकारात्मक परिस्थितीच दिसून येतो. अशी स्थिती उद्भवण्यास भारतीय समाजाची पितृसत्ताक मानसिकता कारणीभूत असल्याचे दिसून येते. पितृसत्ता समाजातील सर्व संसाधनांची मालकी पुरुषांनाच देते. समाजातील सर्व संस्था ही पितृसत्ताक संस्कृतीच्या वर्चस्वाखाली काम करताना दिसून येतात. यामुळेच हक्क मिळूनही स्त्रियांना हक्कांचा वापर करणे किंवा उपभोग घेणे शक्य होत नाही.

केतकावळे हे गाव पुणे जिल्ह्यातील पुरंदर या तालुक्यात डोंगराच्या कुशीत वसलेले आहे. या गावातील एकूण घरांची संख्या २७५ असून गावाची एकूण लोकसंख्या १२००–१३०० च्या आसपास आहे. महिला व पुरुषांचे प्रमाण या गावात सम असल्याचे दिसते. संख्यात्मकदृष्ट्या महिला या जरी पुरुषांच्या बरोबरीने असल्या तरी राजकीय प्रक्रियेतील त्यांचा सहभाग हा पुरुषांच्याबरोबरीने असल्याचे दिसून येत नाही.

या गावाच्या राजकीय प्रक्रियेतील सहभाग लक्षात घेता असे दिसून आले की, एकंदरीत सर्वच लोकांचा राजकीय सहभाग हा फारच मर्यादित स्वरूपाचा आढळून आला आहे. राजकीय सहभाग हा समाजात सतत व विविध पातळ्यांवर घडून येत असतो. त्यात निवडणुका, मतदान, राजकीय प्रश्नांवरील चर्चा, निषेध मोर्चे, राजकीय सभा, संमेलने, मेळावे, आंदोलने अशा अनेक कृतींचा त्यात समावेश होतो. परंतु या गावातील राजकीय सहभाग हा निवडणुक राजकारणाच्या चौकटीतच आकाराला आल्याचे दिसून येते. त्यातल्या त्यात महिलांचा राजकीय सहभाग तर फक्त मतदानापुरताच मर्यादित असल्याचे दिसून येते. सामाजिक सर्वेक्षणाच्या माध्यमातून केतकावळे गावातील सामाजिक, राजकीय प्रक्रियेचा अभ्यास करताना महिलांना प्रश्नावलीतील प्रश्न विचारून त्यांच्या उत्तरांच्या आणि वर्तनाच्या अभ्यासातून त्यांच्या राजकीय सहभागाची व्याप्ती समजून घेण्याचा प्रयत्न करण्यात आला आहे.त्यातून जे निष्कर्ष पुढे आले आहेत ती पुढीलप्रमाणे:

१. गावातील सर्व महिला अगदी न चुकता मतदानास जातात, पण आपण कोणाला मतदान करावे, का करावे, कशासाठी करावे याचा निर्णय त्या स्वतःच घेत असल्याचे दिसून आले नाही.
२. महिला मतदान करताना आपल्या घरातल्यांबरोबर, सामाजिक प्रतिष्ठित लोकांबरोबर चर्चा करतात असे म्हणाल्या पण त्या चर्चा किती अर्थपूर्ण व महिलांची राजकीय जागृती वाढवणाऱ्या असतील या बाबत शंका उत्पन्न होऊ शकते. कारण या चर्चेचा मुख्य विषय हा मतदान कोणाला करावे हाच असण्याची शक्यता आहे.
३. महिलांची ग्रामसभेस उपस्थिती ही नसल्यातच जमा आहे. त्यामुळे ग्रामसभांच्या चर्चेत त्या समावेश घेतच नाहीत. त्या चर्चेतील विषयही त्यांना फारसे माहीत नाहीत असेच दिसून येते.
४. गावातील समस्यांबाबत महिलांमध्ये जागृती दिसून आली पण त्या समस्या सोडवण्यासाठी स्वतः जाऊन ग्राम पंचायत सदस्य, सरपंचांना भेटणे या कृती करताना त्या दिसून आल्या नाहीत. अथवा या समस्या सोडवणे हे या लोकांचेच काम आहे हेही त्यांना ठाऊक नसल्याचेच जाणवले.

५. मतदान नेहमी करण्यास जात असणाऱ्या महिला या सर्व प्रकारच्या पार्श्वभूमी असणाऱ्या होत्या. त्यात शिक्षित, अशिक्षित, नोकरी करणाऱ्या, शेत मजुरी करणाऱ्या, झाडलोट करणाऱ्या, गृहिणी, शेतकरी महिला यांचा समावेश होता. पण मतदाना पलीकडे राजकारणाबाबत त्या उदासीन असल्याचेच दिसून आले.

६. महिला मतदान करतात पण त्यांना राजकीय पक्ष, त्यांची विचारप्रणाली या बाबत फार माहिती असल्याचे जाणवले नाही.

७. महिलांना लोकसभा आणि विधानसभेत आरक्षण मिळावे का ? या प्रश्नावर उत्तरदात्यांकडून (पुरुष व महिला) दोन प्रकारच्या प्रतिक्रिया उमटलेल्या आढळतात. एक म्हणजे महिला असल्यांने त्यांना आरक्षण मिळावे असे वाटते. दुसरी प्रतिक्रिया म्हणजे महिला तर आता सक्षम आहेत मग त्यांना आरक्षणाची गरजच काय आहे. या दोन्ही प्रतिक्रियांचा अभ्यास करताना असे दिसून आले की, महिलांना आरक्षण देण्यामागीचा हेतूच पुरुष तसेच महिला उत्तरदात्यांना समजल्याचे दिसून आले नाही.

८. सद्यस्थितीत सत्तेत असणाऱ्या महिला व यापूर्वी सत्तेत आलेल्या महिला या स्वतः कारभार करताना क्वचितच दिसून आल्या.

९. महिला बचत गटांच्या बैठकांमध्ये केवळ आर्थिक व्यवहारावर चर्चा झालेल्या दिसून येतात म्हणून महिला बचत गट हे राजकीय हक्क जागृतीच्या प्रक्रियेत उपयुक्त भूमिका वटवित असल्याचेआढळून आले नाही.

१०. बऱ्याचशा महिलांनी राजकारणात रसच नाही असे सांगितले आणि काहींनी राजकारण आवडते पण घरच्या जबाबदाऱ्यांमुळे जाता येत नाही असे सांगितले. म्हणजे राजकारणाची आवड असलीतरी राजकारणात सहभागी होण्यास वेळ नसल्याचे दिसून येते.

थोडक्यात भारतीय पितृसत्ताक समाजव्यवस्था आणि तिची वैशिष्ट्ये आपल्याला या गावातही दिसून येतात. महिला राजकीय सहभाग लोकशाहीतील मतदानाची संख्या वाढवण्याच्या दृष्टीने महत्वाचा बनला असला तरी राजकीय प्रक्रियेला प्रभावित करण्याच्या दृष्टीने अजूनही खूपच कमी प्रमाणात आहे. आल्मंड आणि व्हर्बा यांनी मांडलेल्या राजकीय संस्कृतीच्या प्रकारातील आज्ञांकित आणि विषयांकित राजकीय संस्कृती आपल्याला महिलांमध्ये जास्त प्रमाणात दिसून येते. आज्ञांकित राजकीय संस्कृतीत व्यक्ती आज्ञापालन करण्यावर भर देते. विषयांकित राजकीय संस्कृतीत व्यक्ती राजकीय प्रक्रियेत सहभागी होत असली तरी आपण राजकीय प्रक्रिया बदलवू शकतो, तिला प्रभावित करू शकतो याबाबत तिच्या मनात खात्री नसते. या गावातही महिलांचा राजकीय सहभाग या वरील दोन प्रवृत्तीतच फिरताना दिसून आला आहे.

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''केतकावळे गावातील भाषा आणि लोकसाहित्य यांचा अभ्यास''

डॉ. वंदना सोनवले

मराठी विभाग

प्रास्ताविक :

लोकसाहित्य म्हटले की, लोकमानसाचे विविध वाङ्मयीन, सांस्कृतिक, कलात्मक आविष्कार सूचित केले जातात. लोकसाहित्यामध्ये लोकसंस्कृतीच्या जडणघडणीतील शब्द साधने (वाच्यार्थाने मौखिक वाङ्मय) व शब्देतर साधने (रूढी, चालीरीती, पारंपरिक कला, कारागिरी, विविध प्रकारचे खेळ, ज्योतिष, वैद्यक इ.) या सर्वांचाच समावेश झालेला आहे. ही सर्व साधने लोकसंस्कृतीचा अविभाज्य भाग बनलेली आहेत. लोकसाहित्य या शब्दातील 'लोक' या पूर्वपदाचा अर्थही अनेकदा ग्रामीण, निरक्षर, जुन्या परंपरेतील असा केला जातो. लोकसाहित्य हे त्या त्या ठिकाणच्या बोलीभाषेतील असते. म्हणूनच पुरंदर तालुक्यातील केतकावळे या गावातील लोकसाहित्याचा अभ्यास करत असताना तेथील बोलीभाषेचा अभ्यास केला आहे. बोलीभाषेवरून त्या गावातील लोकसंस्कृती समजते.

संशोधन अभ्यासाची उद्दिष्टे आणि ध्येय :

केतकावळे हे गाव शिवकालापासून पुरंदर तालुक्यातील एक अत्यंत महत्त्वाचे गाव आहे. या गावाला ऐतिहासिक व सामाजिक व धार्मिक पार्श्वभूमी लाभली आहे. या गावाच्या एका बाजूला स्वराज्याचे दुसरे छत्रपती श्री संभाजीराजे यांचे जन्मस्थान असलेला पुरंदरसारखा अभेद्य किल्ला उभा आहे. गावातच प्रति बालाजीचे मंदिर आहे. त्यामुळे येथे विविध धर्माचे व विविध भाषा बोलणारे लोक या ठिकाणाला भेट देत असतात. केतकावळे गावाच्या जवळच चीवेवाडी हे छोटेसे गाव डोंगराच्या कुशीत वसलेले आहे. या गावात आदिवासी यांची लोकवस्ती आढळते. त्यामुळे केतकावळे या गावाच्या बोलीभाषेचा, लोककलांचा, लोकगीतांचा अभ्यास करणे. तसेच केतकावळे गावातील लोकांच्या म्हणी, उखाणे, वाक्यप्रचार यांचे संकलन करणे हे या अभ्यासाची उद्दिष्टे व ध्येय आहे.

अभ्यासपद्धती :

लोकसाहित्याचा अभ्यास करत असताना एकच एक अशी अभ्यासपद्धती वापरून चालत नाही. अभ्यासाच्या उद्दिष्टानुसार अभ्यासाच्या पद्धती बदलतात. लोकसाहित्याचा अभ्यास कोणत्याही उपलब्ध पुस्तकांच्या आधारे एका ठिकाणी बसून करता येत नाही तर त्यासाठी प्रत्यक्ष त्या निवडलेल्या क्षेत्रात खेड्यापाड्यात संशोधकाला फिरावे लागते. विश्वासाचे वातावरण निर्माण करावे लागते. तेव्हा मौखिक परंपरेतील अस्सल लोकसाहित्य त्यांच्याकडून बाहेर येते. मग ते संकलित करून संपादित करता येते. म्हणून केतकावळे या गावातील

बोलीभाषेचा व लोकसाहित्याचा अभ्यास करण्यासाठी क्षेत्रीय व ऐतिहासिक संशोधन पद्धतीचा वापर केला आहे.

तथ्य आणि विश्लेषण :

पुणे जिल्ह्यातील, पुरंदर तालुक्यातील केतकावळे या ठिकाणी राष्ट्रीय सेवा योजनेच्या विशेष श्रमसंस्कार शिबिराच्या अंतर्गत मराठी या विषयाचे सर्वेक्षण केले. संशोधकाने प्रत्यक्षात तेथे जाऊन मराठीतील लोकसाहित्याचे संकलन केले. विशेषतः केतकावळे गावातील महिलांच्या, मागच्या पिढीतील वृद्धांच्या घरोघरी जाऊन भेटी घेऊन त्यांच्याकडे असलेले उखाणे, लोकगीते यांचे संकलन केले आहे. पुरंदर तालुक्यातील केतकावळे हे ९ व्या शतकापासून अस्तित्व असलेले महत्त्वपूर्ण खेडेगाव आहे. केतकावळे हे गाव साधारणत: अडीच हजार लोकसंख्येचे आहे. या गावातील समाज, भाषा, संस्कृतीला मध्ययुगीन काळाचा समर्थ इतिहास आणि वारसा आहे. शिवकालापासून या गावात महाराष्ट्रभाषा मराठी ही मातृभाषा म्हणून बोलली जाते. भाषेच्या विकासाचा एक संपन्न आढावा त्या भाषेतील मौखिक वाङ्मयातून, लोकसाहित्यातून घेता येतो. या सर्वेक्षणादरम्यान जाणीवपूर्वक या सांस्कृतिक आणि भाषिक संपन्नतेचा मागोवा घेण्यात आला. १६ व्या १७ या शतकातील मराठी राजवटीच्या काळातील राजकीय, सामाजिक, सांस्कृतिक जीवनाचा लक्षणीय संस्कार या परिसरातील बोली भूगोलावर झाल्याचे आढळते. त्यादरम्यान अनेक म्हणी, वाक्प्रचार, उखाणे, लोकगीते, लोककथा यांचे संकलन मराठी विभागाने केले. काही निवडक संकलन पुढे देत आहोत. लोकसाहित्यातील एक मौल्यवान लेणं म्हणजे उखाणा.

शंकराच्या पिंडीवर खोबऱ्याची वाटी,

.....ला बायको केली संसारासाठी

भारतात लोकगीतांची परंपरा अतिप्राचीन काळापासून प्रचलित आहे. लोकगीतांची ही परंपरा मौखिक आहे.ही लोकगीते म्हणजे लोकवाणी, मानवी जीवनावर मोजके पण मार्मिक भाष्य करण्यात कुशल असलेली, वाङ्मयानंद देणारी व समाजदर्शन घडविणारी लोकगीते मानवी जीवनाची संस्कृतीसंरक्षक म्हणून महत्त्वाची आहेत.ही लोकगीते एका पिढीकडून दुसऱ्या पिढीकडे संक्रमित होत असतात. ही लोकगीते समुहाने किंवा एक व्यक्तीसुद्धा गाऊ शकते. गाण्याच्या ओघानुसार लिहिणे इतक्या जलद गतीने होत नाही. तेव्हा यातील काही शब्द गाळण्याचा धोका असतो. परंतु आता सुदैवाने दृक श्राव्य माध्यमे, सामग्री घेऊन खेड्यापाड्यात जाता येते. मोबाईलमधूनही फोटो आणि ध्वनीसंग्रह करणे शक्य झाले आहे. त्यामुळे संशोधकाला हे संकलन प्रत्यक्ष पुरावा म्हणूनही दाखवता येते. तसेच हे संकलन संग्रहित करून ठेवणे सोपे झालेले आहे.

स्वराज्य स्थापनेच्या काळात छत्रपती शिवाजी महाराजांना लोक कलाकारांच्या लोककलांचा महत्त्वपूर्ण उपयोग झाला. जनसामान्यांचे प्रबोधन करण्यासाठी तसेच हेर खात्याच्या बातम्या पोहचवण्यासाठी वासुदेव, गोंधळी, वाघ्या मुरळी, भारुड सादर करणारे कलाकार यांचा अतिशय खुबीने महाराजांनी वापर केला. कृष्णभक्त वासुदेव आपल्या गीतातून या स्वरूपाचे प्रबोधनाचे कार्य उत्तमरीतीने करत असत. आजही ही परंपरा

समर्थपणे लोकाकलाकारांकडून केतकावळे परिसरात जपली जात आहे. आधुनिक जीवनपद्धतीचा स्वीकार करत असतानाच शिक्षण, शेती, नवीन आर्थिक व्ययसाय यांसोबतच हे कलाकार जाणीवपूर्वक आपली लोककला जोपासत आहेत.

हरी.. नाम बोला

वासुदेव आला, वासुदेव आला

विट्ठला , पंढरीच्या विठ्ठला

सोहळा तो दाटला, सोहळा तो दाटला

जनीसंगे दळताना, गायिली तू गीता

तुझ्या पिरतीचा डंका , हृदयात नाचला

सोहळा तो दाटला, सोहळा तो दाटला

हरी.. नाम बोला

वासुदेव आला, वासुदेव आला

जनाबाईंच्या भक्ती माधुर्याची गोडी वासुदेव आपल्या गीतातून पहाटेच्या प्रसंगावेळी जनसामान्यांच्या कानावर घालत आहेत. गोंधळी समजाचे कलाकार अगीनदासाच्या पोवाड्यातून तानाजी मालुसरे यांना महादेव कोळी समाजाने केलेल्या साहायचे वर्णन करीत आहेत. छत्रपती संभाजीराजे ते महाराणी ताराराणीपर्यंत स्वराज्य सांभाळणाऱ्या थोर व्यक्तींचा इतिहास आजही गोंधळ गीतांमधून ते समाजासमोर मांडत आहेत.

सारांश, मौखिक साहित्याने केवळ भ्शिक्चा नव्हे तर समाज आणि संस्कृती जतन करण्याचे महत्त्वपूर्ण कार्य पार पडलेले आहे हे या सर्वेक्षणातून दिसून येत आहे.

निष्कर्ष :

१. पुरंदर तालुक्यातील केतकावळे हे ९ व्या शतकापासून अस्तित्व असलेले महत्त्वपूर्ण खेडेगाव आहे.

२. या गावातील समाज, भाषा, संस्कृतीला मध्ययुगीन काळाचा समर्थ इतिहास आणि वारसा आहे.

३. १६ व्या १७ या शतकातील मराठी राजवटीच्या काळातील राजकीय, सामाजिक, सांस्कृतिक जीवनाचा लक्षणीय संस्कार या परिसरातील बोली भूगोलावर झाल्याचे आढळते.

४. १६ व्या शतकातील लोक कलाकारांच्या मार्फत जोपासल्या गेलेल्या लोकगीत, लोककथा, म्हणी, वाक्प्रचार इत्यादींचे भाषिक सौंदर्य आजही मौखिक परंपरेने येथील लोकसमुहाने जतन केले आहे.

५. कोरड्यास, ढवळा भात, शाळू, कडबोळे, माडग, भालाईत, बानाईत या प्रकारचे शिवकालीन शब्द त्यांच्या बोलीभाषेत आढळतात.

संदर्भ :

१. लोकसाहित्याचे उपासक , रा. चिं. ढेरे

२. लोकसाहित्याचे स्वरूप डॉ. प्रभाकर मांडे

अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेच्या विशेष शिबिराचे उदघाट्न

पुणे : प्रतिनिधी

पुणे जिल्हा शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेचे विशेष शिबीर केतकावळे (ता. पुरंदर) या ठिकाणी आयोजित करण्यात आले होते.

या शिबीराच्या उद्घाटन समारंभासाठी पुणे जिल्हा शिक्षण मंडळाचे उपसचिव एल. एम. पवार, महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे, सरपंच मारूती भडाळे, कार्यक्रम अधिकारी डॉ. सविता डॉ. कुलकर्णी, प्रा. नितीन लगड, डॉ. अंजू मुंडे, प्रा. गौरव शेलार उपस्थित होते.

श्रमदानाच्या साहित्याच्या पूजनाने शिबीराचे उद्घाटन करण्यात आले. कार्यक्रमाचे प्रास्ताविक करताना डॉ. सविता कुलकर्णी यांनी राष्ट्रीय सेवा योजनेची माहिती सांगून विशेष शिबीरामध्ये विविध उपक्रम आयोजित केल्याचे सांगितले. यामध्ये महिला सबलीकरण, विवाहपूर्व समुपदेशन, मुलींसाठी स्वसंरक्षण कार्यशाळा आयोजित केली होती.

यावर्षी शिबीराची संकल्पना 'युवकांचा ध्यास ग्राम शहर विकास' अशी असून, या संदर्भात आणि मतदान जागृती या संकल्पनेवर आधारित विविध उपक्रम आयोजिक

करण्यात येत असल्याची माहिती त्यांनी दिली. सरपंच मारूती भडाळे यांनी शिबीरातील सर्व विद्यार्थी आणि शिक्षक यांचे स्वागत केले. शिबीरातील आयोजित उपक्रमांचे त्यांनी कौतुक केले.

महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांनी अशा शिबीरांमध्ये सहभागी झाल्याने विद्यार्थ्यांचा आत्मविश्वास वाढतो, विविध प्रकारच्या संधी प्राप्त होतात आणि नवनवीन गोष्टी शिकायला मिळतात त्यामुळे विद्यार्थ्यांनी अशा शिबीरामध्ये सहभागी व्हावे. यानंतर प्राणायाम आणि ओंकाराचे महत्त्व सांगून त्यांच्याकडून ओंकार करवून घेतले. एकाग्रतेचे महत्त्व सांगणारी ओम ही ॲक्टीव्हीटी करून घेतली.

कार्यक्रमाचे अध्यक्ष एल. एम. पवार यांनी विद्यार्थ्यांचे कौतुक केले. आणि शिबीरात सहभागी होणारे विद्यार्थी वेगळे असून, या निमित्ताने अनेक गोष्टी शिकायला मिळतात आणि ते अनुभवाने समृध्द होतात. विविध अनुभव सांगून त्यांनी अशा उपक्रमांचे आयुष्यातील महत्त्व सांगितले.

कार्यक्रमाचे सूत्रसंचालन प्रा. नितीन लगड यांनी, तर आभार प्रा. गौरव शेलार यांनी मानले. या कार्यक्रमाचे नियोजन डॉ. सविता कुलकर्णी, प्रा. नितीन लगड, डॉ. अंज मुंडे, प्रा. गौरव शेलार, डॉ. वंदना सोनवले, प्रा. शितल गायकवाड, प्रा. गणेश आवटे यांनी महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांच्या मार्गदर्शनाखाली केले.

अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेच्या शिबिराचा समारोप

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पुणे जिल्हा शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेच्या वतीने केतकावळे (ता. पुरंदर) येथे आयोजित शिबिराचा समारोप उत्साहात संपन्न झाला. करण्यात आला.

या समारंभासाठी यशवंत शितोळे, प्राचार्य डॉ. नितीन घोरपडे, सरपंच मारूती भडाळे, कार्यक्रम अधिकारी डॉ. सविता कुलकर्णी, प्रा. नितीन लगड, डॉ. अंजू मुंडे, प्रा. गौरव शेलार उपस्थित होते.

प्रास्ताविक करताना रा. से. यो. कार्यक्रम अधिकारी डॉ. सविता कुलकर्णी यांनी शिबीरातील विविध उपक्रमांची माहिती दिली. यामध्ये गावामधील रस्त्यांची स्वच्छता, शाळेच्या मैदानाची स्वच्छता, सलग समपातळी चर, झाडांना रंग असे श्रमदान, मतदान जनजागृतीवर आधारीत पोस्टर, पथनाट्य आणि रॅली आयोजित केल्याचे सांगितले. गावामधील अंगणवाडीतील मुलांच्या दात आणि डोळ्यांची तपासणी, गावातील पाणी, प्राणि, वनस्पती, पिकांचा प्रकार, भाषा, गावचा इतिहास, गावातील राजकारणामधील स्त्रियांचा सहभाग, बालाजी मंदिर या धार्मिक पर्यटन स्थळाचा

गोष्टींचे सर्वेक्षण करण्यात आल्याची माहिती त्यांनी दिली.

श्वेता कदम आणि रामकृष्ण सुतार या विद्यार्थ्यांचा उत्कृष्ट स्वयंसेवक म्हणून आणि साने गुरूजी या गटाचा उत्कृष्ट गट म्हणून सत्कार करण्या आला. तसेच विद्यार्थी ओम शिंगोटे, रामकृष्ण सुतार, पूर्वा पात्रे, अुती भोसले यांनी मनोगत व्यक्त केले. गावातील हर्षल जगदाळे, श्री. बाठे, श्री. गोळे यांनी आपले मनोगत व्यक्त केले.यानंतर

महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे यांनी राष्ट्रीय सेवा योजना हा अत्यंत सुलभ उपक्रम असून, यामधून विद्यार्थ्यांना एक व्यासपीठ मिळते आणि त्यातूनच त्यांना त्यांच्यातील उत्तम गोष्टी कळतात आणि त्या विकसित करण्याची संधी मिळते. यावेळी त्यांनी महाविद्यालयातील विविध शिक्षक आणि विद्यार्थ्यांनी सर्वेक्षण केलेल्या विषय, त्याची उद्दीष्टे, अभ्यासपध्दती या विषयीची माहिती देणारे प्रेझेंटशेन केले. यानंतर यशवंत शितोळे यांनी गावामध्ये केलेल्या कामांची माहिती करून घेतली. आणि आपणही राष्ट्रीय सेवा योजना असल्याचे सांगितले.श्रमदान, व्याख्यान, हे करत असताना त्याचा आनंद घेतला पाहिजे असे त्यांनी सांगितले.

यावेळी शिबीराचा अहवाल मोहनराव देशमुख यांना दिला. यांनतर मोहनराव देशमुख यांनी रा.से.यो. विषयी माहिती देताना हा उपक्रम भव्य गोष्टी डोळ्यासमोर ठेवून केल्याचे सांगितले. विद्यार्थी या शिबिरामधून अनेक गोष्टी शिकतात.

कार्यक्रमाचे सूत्रसंचालन प्रा. नितीन लगड यांनी, तर आभार डॉ. अंजू मुंडे यांनी मानले. महाविद्यालयाच्या वतीने डॉ. सविता कुलकर्णी, डॉ. नितीन लगड, डॉ. अंजू मुंडे, प्रा. गौरव शेलार, प्रा. गणेश आवटे यांचा सत्कार करण्यात आला.

अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेचे विशेष शिबीर संपन्न

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पुणे जिल्हा शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेचे विशेष शिबीर केतकावळे, ता. पुरंदर या ठिकाणी आयोजित करण्यात आले होते.

या शिबीराच्या उद्घाटनप्रसंगी पुणे जिल्हा शिक्षण मंडळाचे उपसचिव एल. एम. पवार, महाविद्यालयाचे प्राचार्य डॉ. नितीन घोरपडे, सरपंच मारूती भडाळे, कार्यक्रम अधिकारी डॉ. सविता डॉ. कुलकर्णी, प्रा. नितीन लगड, डॉ. अंजू मुंदे, प्रा. गौरव शेलार उपस्थित होते.

या शिबिरात श्रमदान करीत गावातील रस्त्यांची स्वच्छता करण्यात आली. झाडांना रंग लावण्यात आला. शाळेचा परिसर स्वच्छ केला. शाळेच्या मैदानावर वाढलेले गवत काढले. श्रमदानामध्ये विद्यार्थ्यांनी केतकावळे गावामागील डोंगरावर पाणी अडविण्यासाठी आणि जिरविण्यासाठी चर खोदले. तसेच प्राणी आणि पक्ष्यांना पाणी पिण्यासाठी लहान लहान तळी करण्यात आली.

शिबिरकालात उत्स्फुर्त नाट्यस्पर्धा, देशभक्तीपर समुहगीत स्पर्धा, प्रसंगनाट्य, जाहिरात स्पर्धा, पाककला स्पर्धा आयोजित करण्यात आल्या. नवमतदार नोंदणी आणि मतदानाविषयी जागृती व्हावी, या हेतूने गावामध्ये मतदान रॅली काढण्यात आली. यावेळी स्लोगन तयार करून ती देण्यात आली. मतदान जागृती या विषयावरील पोस्टर स्पर्धा आयोजित करण्यात आली. तू माझा सांगाती या शरदचंद्रजी पवार यांच्या पुस्तकाचे वाचन करण्यात आले. श्रीकांत लक्ष्मीशंकर यांचे विवाहपूर्व समुपदेशन या विषयावरील व्याख्यान, अमृता देशपांडे यांच्या महिला सबलीकरण विषयावरील व्याख्यान, विद्यार्थिनींसाठी स्वसंरक्षण कार्यशाळा आणि मूल्यशिक्षण कार्यशाळा आयोजित करण्यात आली. गावातील महिलांची ओळख व्हावी, त्यांच्याशी संवाद साधता यावा, त्यांचे सणवार, संस्कृती या विषयीची माहिती करून घेण्यासाठी हळदी कुंकवाचे आयोजन करण्यात आले. यावेळी विद्यार्थिनींनी उपस्थित महिलांना विडयाचे पान, सुपारी आणि तुळशीचे रोप दिले.

अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेच्या विशेष शिबिरात गाव सर्वेक्षण

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पुणे जिल्हा शिक्षण मंडळाच्या अण्णासाहेब मगर महाविद्यालयाच्या राष्ट्रीय सेवा योजनेचे विशेष शिबीर केतकावळे, (ता. पुरंदर) येथे आयोजित करण्यात आले होते. या शिबिरांतर्गत केतकावळे गावातील माती, पाणी, प्राणी, वनस्पती, शेतीच्या पद्धती, पर्यटन, भाषा, ऊर्जा वापराची माध्यमे, राजकीय इतिहास, आर्थिक सर्वेक्षण याविषयी सर्वेक्षण करण्यात आले.

रसायनशास्त्र, प्राणिशास्त्र, भौतिकशास्त्र, वनस्पतीशास्त्र, सूक्ष्मजीवशास्त्र, भूगोल, पर्यटन, मराठी, अर्थशास्त्र विभागातील संबंधित विषयाचे शिक्षक आणि विद्यार्थी यांनी सहकार्य केले. रसायनशास्त्र, सूक्ष्मजीवशास्त्र विषयाच्या विद्यार्थ्यांनी गावातील विहिरीचे, कॅनॉलचे पाणी, तसेच शेतातील मातीचे नमुने घेतले. या नमुन्यांचे विश्लेषण करून त्याचा अहवाल तयार करण्यात येणार आहे. भूगोल विभागाच्या विद्यार्थ्यांनी गावातील भौगोलिक परिस्थिती, शेतामध्ये असणारी पिके, तेथे असणारा मातीचा प्रकार याचा अभ्यास केला. भौतिकशास्त्र विषयाच्या विद्यार्थ्यांनी गावामध्ये वापरल्या जाणा-या ऊर्जास्त्रोतांचा अभ्यास केला. प्राणिशास्त्र विभागाच्या विद्यार्थ्यांनी गावातील पक्षी, प्राणी, किटक आणि तेथील भौगोलिक परिस्थिती याचा अभ्यास केला.

वनस्पतीशास्त्र विभागाच्या विद्यार्थ्यांनी गावातील औषधी वनस्पती, तेथील शेती पध्दती, पिकांचा प्रकार, जैवविविधता या विषयाचा अभ्यास केला. पर्यटन विषयाच्या विद्यार्थ्यांनी बालाजी या पर्यटनस्थळाचा तेथील परिस्थितीवर होणारा अभ्यास केला. अर्थशास्त्र विषयाच्या विद्यार्थ्यांनी गावातील शेतीक्षेत्रावर हवामान बदलाचा परिणाम अभ्यासला. मानसशास्त्र विषयाच्या विद्यार्थ्यांनी गावातील शाळेतील दहावीच्या विद्यार्थ्यांची कलचाचणी घेतली.

मराठी विभागाच्या वतीने गावतील बोली भाषा, बोलण्यात येणारे इतर शब्द, ओव्या, म्हणी, गाणी यांची माहिती घेण्यात आली. यासाठी प्रा. शितल जगताप, स्नेहल शिपलकर, प्रा. तन्वी खरे, प्रा. अंजली कामशेट्टी, डॉ. शुभांगी शिंदे, प्रा. उर्मिला घनगर, प्रा. शितल गायकवाड, प्रा. शिल्पी दासगुप्ता, डॉ. अंजू मुंदे, प्रा. भावना जगताप, प्रा. शितल आर. गायकवाड, प्रा. प्रविण पोतदार, प्रा. प्रज्ञा खरात, प्रा. संगिता देवकर, डॉ. वंदना सोनवले यांनी विद्यार्थ्यांना मार्गदर्शन केले.