**AgSURS - Authors’ Response to Reviewers Comments Report**

|  |  |
| --- | --- |
| **Abstract Title** | Impact of Sudden Banning of Chemical Fertilizers and other Agrochemicals on Performance of Smallholders’ Tea production in Ratnapura District |
| **Abstract Body** | It is high time to study the impact of banning chemical fertilizers and other agrochemicals on performance of smallholders’ tea production in the country as it is important in many aspects of the economy. The government banned chemical fertilizers and other agrochemicals at once in April 2021, in order to save Sri Lanka’s agricultural sector, especially farmers and consumers from various health problems. This unexpected situation has created many problems for farmers. This study was conducted to assess the impacts of sudden banning of chemical fertilizers and other agrochemicals on performance of smallholders’ tea production in Ratnapura District. Ratnapura district was selected as the research area, because tea cultivation has been conducted in many Divisional Secretarial divisions of it. A Sample of 120 tea smallholders was randomly selected who supply green leaves to a famous tea factory in Balangoda (hereafter named as ABC tea factory) and data were collected using a field survey from August to November 2022. Descriptive statistics and paired t-tests were used to analyze the data. Results revealed that most of the tea smallholders are male farmers and they are in their middle ages. They have a significant level of education. However, most of them have very small size tea lands. When compare with before the banning, their tea production and monthly income have gone down. The majority of them have a good understanding of the positive and negative aspects of chemical fertilizers and other agrochemicals. Moreover, some farmers are spending much on various alternative fertilizers and other agrochemicals due to the unavailability of chemical fertilizers and agrochemicals. While some farmers are moving away from farming, some farmers are turning to use different cultural practices. Results of the research indicate that, there is a significant increase in the cost spent for agrochemicals and cost of production. And also there is a significant decrease in tea yield (production) after the banning of chemical fertilizers and other agrochemicals. Farmers wish to move away from chemical fertilizers and other agrochemicals gradually, if they have suitable alternatives. But at the moment, they are facing problems due to the unavailability of effective and efficient alternatives for chemical fertilizers and other agrochemicals. So, finding better alternatives for chemical fertilizers and other agrochemicals is a felt need. According to farmers’ point of view, integrated utilization of inorganic and organic fertilizers is the effective solution to reach optimum production. |
| **Key Words (5 Words)** | Chemical fertilizers, agrochemicals, environmental pollution, tea cultivation, tea smallholders, organic farming |
| **Abstract ID** | ABM0316 |
| **REVIEWERS 1 COMMENTS & AUTHOR RESPONSE** | |
| **Findings of this study (r1)** | Make a marginal contribution to existing knowledge |
| **Author Response to reviewer Comment on Findings of this study(r1)** | Study confirms the impact of sudden banning fertilizer policy on tea small holders’ cost of production and yield. |
| **Title of the abstract(r1)** | Is appropriate to the thematic area and descriptive |
| **If needs more improvements for**  **"Title" please specify here(r1)** |  |
| **Author Response Title Improvement(r1)** | 120 tea smallholders were randomly selected as the sample from three DS divisions (Balangoda, Opanayaka, Imbulpe) representing the whole district who supply green leaves to ABC tea factory in Balangoda. |
| **The content of the abstract(r1)** | Needs improvements |
| **If needs more improvements for "Abstract" please specify here(r1)** | Rather than saying most of them have very small size tea lands give the average extent |
| **Author Response to content of the abstract(r1)** | Abstract will be improved as “Results revealed that most of the tea smallholders have a significant level of education and the majority having tea lands in between ½-1 Acre.” |
| **Recommendation(r1)** | Accept with minor corrections |
| **REVIEWERS 2 COMMENTS & AUTHOR RESPONSE** | |
| **Findings of this study (r2)** | Confirm known results |
| **Author Response to reviewer Comment on Findings of this study(r2)** | Study confirms the impact of sudden banning fertilizer policy on tea small holders’ cost of production and yield. |
| **Title of the abstract(r2)** | Need Improvement |
| **If needs more improvements for**  **"Title" please specify here(r2)** | Instead of using the term of performance , you can directly use the term of tea production in to the title  Impact of Sudden Banning of Chemical Fertilizers and other Agrochemicals on Smallholders’ Tea production (With Special reference to a tea Factory in Balangoda)  It doesn’t seem that the sample is a representative one for the whole Rathnapura District. |
| **Author Response Title Improvement(r2)** | The title was changed accordingly. New title is “Impact of Sudden Banning of Chemical Fertilizers and other Agrochemicals on Performance of Smallholders’ Tea production in Ratnapura District”. |
| **The content of the abstract(r2)** | Need improvements Accept with minor correction |
| **If needs more improvements for "Abstract" please specify here(r2)** | Sampling is not clear. You have to mention the steps of sampling for the study. Usage of pared T test should be explained. (Hope that is for the tea production before and after the fertilizer policy)  Be specific in presenting findings. The following statements are uncertain.  Moreover, some farmers are spending much on various alternative fertilizers and other agrochemicals due to the unavailability of chemical fertilizers and agrochemicals. While some farmers are moving away from farming, some farmers are turning to use different cultural practices?  This is not a good way to present findings. |
| **Author Response to content of the abstract(r2)** | 120 tea smallholders were randomly selected as the sample from three DS divisions (Balangoda, Opanayaka, Imbulpe) representing the whole district who supply green leaves to ABC tea factory in Balangoda.  T-test was used to analyze the cost of production of tea and tea production before and after the fertilizer policy.  Presenting of findings will be improved in abstract. |
| **Recommendation(r2)** | Accept with major correction |
| **Please justify reasons for If rejection(r2)** |  |
| **Any Other**  **Comment(r2)** |  |
| **Any Other**  **Attachment(r2)** |  |