



SDI Review Form 1.6

Journal Name:	_ Asian Research Journal of Agriculture
Manuscript Number:	Ms_ARJA_28461
Title of the Manuscript:	The Impact of Sachet Water Sachets and Plastic Bottle Wastes on Agricultural Land at Ada, Ghana
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://sciencedomain.org/journal/47/editorial-policy>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<u>Compulsory</u> REVISION comments	<p>WHOLE article: 'waste' is a collective noun, don't use waste. READ the specific journal's "Guidelines to Authors". Abstract should have sub-titles. Reference style not correct. References must appear in the order they are used in the text, thus [1] would be first, [2] second etc. This is also the order they should be in the reference list, not alphabetical as you have them. Don't start a sentence with a number. Rewrite. For example In 137: Table 2 shows that almost half of the population (42%) had no formal education, while 28% of them had basic education...</p> <p>When referring directly to an author, you have to give the name. E.g. In 140: This confirms the findings of Mustapha [9] that formal....</p> <p>All your reporting should be in past tense except when referring to a table.</p> <p>Suggestions per line: Ln 9 ... agricultural land, Ada, Ghana. (space before Ada) Ln 36 ... and bottled water ... Ln 38 The sachets and plastic bottles used to produce the water ... If you can produce water from plastic, you should get the Nobel Prize and the whole world's plastic pollution will be solved!! Ln 39 ... hard to decompose... Does plastic decompose? How long does it take if it decomposes? Several years is too vague. Five, ten, hundred?? Ln 41 .. which in turn affect plant growth... Ln 43 and large number of birds (amount if you cannot</p>	<p>The omissions and errors highlighted has been corrected. Additional information has been added and highlighted with yellow colour. Thank you for the suggestions and the comments.</p>



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	<p>count it)</p> <p>Ln 58 ... bottle waste is mostly seen....</p> <p>Ln 60 ..waste is carried by...</p> <p>Ln 65 The main objective ... was to create awareness of the ...</p> <p>Ln 82 Why District? Surely district will do?</p> <p>Ln 86 Surely the categories should be with small letters?</p> <p>Ln 103 ... affected by soil degradation.</p> <p>Ln 109 ... filling out of questionnaires (or filling in of the specific fields)</p> <p>Ln 109 "Interview with the key informant was... " Were there only one informant? If so, I suggest you interview a few more to get statistically reliable data. If not, change to plural.</p> <p>Ln 117 Last sentence not necessary. If you use a statistical programme, the tools will be there, no need to state it. Maybe just give a reference to the specific programme.</p> <p>Ln 124 These percentages differ from those you gave on page 2. I assume it is in the same district?</p> <p>Ln 128 ... and many women are noted...</p> <p>Ln 137 Surely 42% cannot be a majority?? Table 2 shows that almost half of the population (42%) had no formal education....</p> <p>Ln 146 Ada area or Ada Area?</p> <p>Ln 150 The area has a large variation in household size as indicated in Table 4. Of the population, 52% is made up of 6-10 members in the household, while 11-15 members per household represented 10% of the population. Ln 158... compared to bottled water. Of the respondents, 76% consumed sachet water. Those who consumed both bottled and sachet water, comprised 18% while 6% only used bottled water.</p> <p>Ln 174 Table 6 shows that</p> <p>Ln 175 When asked, 44% of the respondents</p>	
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	<p>indicated that they left the plastic waste in the houses, farms and public spaces where they consumed the water.</p> <p>Ln 181 eventually get mixed up...</p> <p>Ln 195 What does “kenkeyetc” means??</p> <p>Ln 217 Check with the relevant journal how to cite a personal communication (and if this was not personal, refer to the source correctly).</p> <p>Lines 201-218 I have serious problems with your statements in this section. On what grounds do you base your statement that plastic pollution caused the decline in the crop yields? I am not disputing the fact that it has a negative impact on the soil and the crop, but your data does not link the two problems. Did you monitor the increase of plastic waste upon the lands over the time the yields have dropped? Did you monitor the rainfall and temperature? Surely weather has a bigger effect on the crop yields. What about climate change? Any dry spells in this period? Or floods? Or outbreak of pests and disease? Or change in management practices? Did all the farmers plant all the crops over the time? If you used the national averages for crop yields, are you very sure that the exact same pastures were planted? All these could have significant effect on the yields, with or without plastic pollution. The statistics to back up your statements are lacking. Not even one incident of comparing stats such as correlation. How did you get to your conclusions, except for the statement made by the director of Food and Agriculture? In line 210 you state that “plastic ... increases biological degradation of litter and soil organic matter which trigger depletion of nutrients....” I can think of many studies that reveal the positive effect of degradation of SOM, since it releases nutrients. Yes, it will accelerate the cycles, but that is good, as long as there is enough organic matter. That</p>	
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	<p>is why crops get fertilised, whether chemically or naturally. And if the plastic increases the SOM, it means that it is decomposes, which I doubt. Maybe in the long run – but how long did you monitor it? DID you monitor it? Do you KNOW that the SOM increase was because of the plastic waste? And the municipal waste should be able to act as compost. Yes, there is the problem of antibiotics and heavy metals, but you don't have data on that.</p> <p>Ln 268 Biodegradable plastics are not the answer. Please google it and you will see how many studies were done on biodegradable plastic. It has its own pollution problems.</p>	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		