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RURAL OCCUPATIONAL MIGRATION: A COASTAL INDIA STUDY

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ABSTRACT

The current study was conducted in 3 districts of West Bengal, Odisha and Andhra Pradesh states for rural occupational migration post COVID in 2022. Approximately 58% of our country's demographic dividend is associated with agriculture as their primary source of income. However, due to changing global trends caused by urbanisation, the rural population is more likely to shift their focus to other sources of income. For the first time in Post-independence India, there was an absolute decline in agricultural employment (23.7 million) between 2004–2005 and 2009–2010, with 22.5 million being unpaid family workers. So, the current study was undertaken to analyze the extent and pattern of migration in the rural households in three coastal states of India using ex post facto research design with a multi stage random sampling technique. This paper has deduced the pattern observed among the migrated respondents of Purba Medinipur, Bhogarai and Sompeta districts of the 3 states in terms of gender, income, time period, social participation and type of occupation undertaken. This may not have an immediate impact, but it may have long-term consequences in the form of consumable goods for future generations. Certainly, government should come up with new policies formulations made by focusing such pattern in order to stop the people from migration and engage them in agricultural and allied activities with help of extension personals through effective training and awareness programs.

Keyword: *gender, livelihood, occupational migration, social participation,*

INTRODUCTION

While the rural population is critical to India's agriculture, migration trends are both economically and socially detrimental to the country. There has been a significant influx of individuals moving from rural areas to urban areas in search of employment. Since the start of the 21st Century, the Indian economy has witnessed strong growth, which has been aided by structural changes in both output and employment. Over this period, agriculture's share of employment fell from 61% to 49%, while industry's share increased from 15.5% to 24.3% and services' share increased from 22.5% to 26.7% (Parida, 2015). For the first time in Post - independence India, there was an absolute decline in agricultural employment (23.7 million) between 2004–2005 and 2009–2010, with 22.5 million being unpaid family workers (Parida, 2019). Evaluation of factors influencing migration as well as the causal effects of migration in rural households, particularly in a developing country like India that is severely lacking in terms of employment, annual income, general advancement in living and survival conditions, as well as development in terms of infrastructure and agriculture as an occupational field. The existence of migration as a necessary topic necessitates further investigation into the void that exists in Agriculture and its allied sectors, which may or may not eliminate the need for the search for a secondary source of income. Since the rural population is the essential component for India's agriculture, migratory patterns are both economically and socially disadvantageous to India. Due to the sudden global pandemic that started in 2019 and spread across the globe in 2020, the Indian economy in general and the farm sector, in particular, were affected severely (Ramakumar & Kanitkar, 2020, Harris et al., 2020, Ceylan et al., 2020, Tyagi and Minz 2023). Because of the global lockdown imposed in the wake of the COVID-19 pandemic, conditions such as labour and farm worker shortage (Stephens et al., 2020, Richards and Rickard, 2020), collapse of supply chains (Moosavi *et al.* 2022) at the worldwide scale, and domestic disruption in collection of farm produce from farms by routine setup, disruption in logistic network, interstate blockage in commodity transport, closure of many retail markets, and farmers faced difficulties in mobilising their production due to insufficient labour for different work. (Mishra *et al*., 2021, Roubik *et al*., 2022, Dandekar and Ghai, 2020, Kumar and Anwer, 2020). Certain commodities that profit using technology from time of harvest, such as paddy and wheat, were benefitted from these sudden changes because they do not require a large number of manual labourers. (Srivastava et al., 2017, Lindsay, 2021). The average price obtained by farmers for many crops has decreased as a consequence of

supply chain disturbance and a drop in aggregated demand in the farm market. Retail price trends for many crops were notably different, and the prices of certain food crops rose as well, owing primarily to supply chain instability. (Eileen et al., 2021, Lin and Zhang, 2020, Reardon *et al*., 2020). The effects were more noticeable in linked activities such as dairy, poultry, and fisheries, especially during the shutdown. (Galanakis, 2020, Lese *et al*., 2021) Milk demand fell as a result of the disruption in co-operative milk procurement. Many people were food insecure (Barichelle, 2020; Singh et al., 2020, Torero 2020; Weersink *et al*., 2021) Following the subsequent COVID waves, most of labourers returned to their home states, resulting in labour overcrowding, which served to reduce labour costs (Muneer *et al., 2023*). This contributed to a larger migration of labour away from agriculture, as they were paid less than they should have been. At this point, Indian agriculture is dealing with labour shortages, high input costs, low remunerative prices for cultivators, low capital formation, and numerous other problems. The post-pandemic situation has exacerbated the problems to an extreme

OBJECTIVE

To examine the extent and pattern of migration in rural households in coastal states of India

METHODOLOGY

The current study was conducted in 3 districts namely Purba Medinipur, Balasore and Srikakulam of West Bengal, Odisha and Andhra Pradesh states, respectively post COVID. Ex-post facto research design was followed for the analysis. Ex post facto study or after-the-fact research is a category of research design in which the investigation starts after the fact has occurred without interference from the researcher. A multi-stage Random sampling procedure was applied to draw the 235 sample respondents for the study. The primary data has been collected through two methods survey and observation. The interview schedule was used in the study area for collecting the data. On the basis of experience gained in pre-testing, the necessary modification and suggestions were incorporated before giving a final touch to interview schedule. The secondary data has been collected through different source of materials, portals, websites and other existing records. The other relevant data has been collected from various books, magazines, official records, research paper, internet, journals, news articles and other exiting sources of data.

Table 1: Distribution of respondents migrated from the study area

State	District	Block/ Mandal	Village	Total number of population	Migrated Population	Percentage of Migrated Population
West Bengal	Purba Medinipur	Ramnagar - II	Raypur	501	44	8.78
			Padar Bheri	382	30	7.85
Odisha	Balasore	Bhogarai	Bahalia	421	37	6.41
			Dumeipur	520	57	12.88
Andhra Pradesh	Srikakulam	Sompeta	Pathinivlasa	509	41	8.06
			Busabhadra	312	26	8.33
			Total	**2645**	**235**	**8.88**

RESULTS AND DISCUSSION

The data for the Extent and Pattern of Migration in Rural Households were collected from the study area from September 2021 till March 2022 in the 6 villages namely Raypur & Padar Bheri of West Bengal, Bahalia & Dumeipur of Odisha and Pathinivlasa & Busabhadra of Andhra Pradesh. The results obtained were subjected to treatment and analysis by applying appropriate statistical techniques.

The magnitude of migration revealed a close relationship between migration and social characteristics, primarily age, gender, occupation, income, and social participation. These are the most common influential factors discovered through research findings that influence an individual's movement. The number of migrated peoples were identified from the study area to and listed against the total population of the area to see the share of the migrated people.

Table 2: Distribution of respondents occupation pattern before and after migration (n=235)

States	Pre Migration (%)						Post Migration (%)					
	Farming	Wage Labourer	Small Business	Tenant Farmer	Factory workers	Unemployed	Farming	Wage Labourer	Small Business	Tenant Farmer	Factory workers	Unemployed
W.B	60.81	9.45	0	2.70	2.70	24.32	0	13.51	36.49	25.68	24.32	0
O.D	57.44	4.25	0	8.51	7.44	22.34	0	07.45	43.62	18.09	30.85	0
A.P	46.27	8.96	7.46	7.46	4.48	25.37	0	16.42	25.37	40.30	17.91	0

The data regarding the occupation pattern revealed that before migration most of the farmers and unemployed respondents in the three states were found to work as tenant farmer, factory workers, small business or trading and wage laborers after migration.

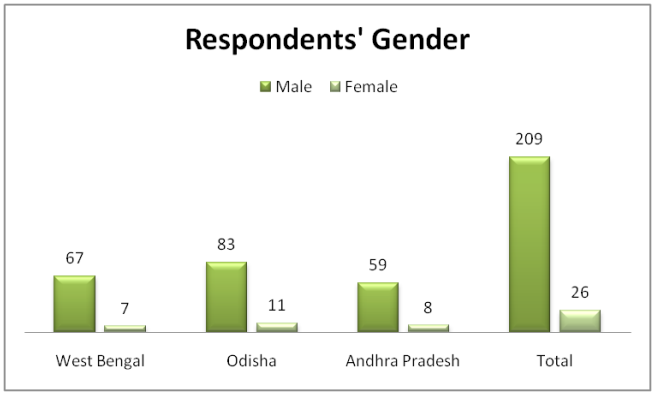

Fig. 1: Gender based migration pattern of the respondents

The data revealed that males (88.94%) migrated more frequently than females (11.06%), in line with the results of Camlin et al. (2014). This may be due to the social security and physical strength they have to make the journey and change their occupation to suit their needs and adjust to their situation. However, females were largely left behind to manage agricultural land, giving the beginning of the idea of Feminization in Agriculture. Despite the shrinking gender gap in occupational migration, both genders are actively seeking higher earning opportunities to enable them to thrive.

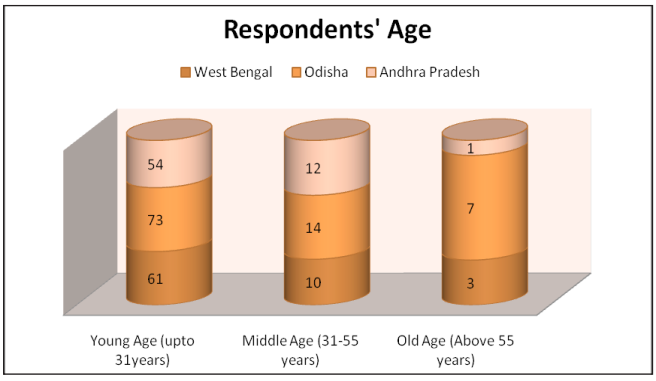

Fig. 2: Age based migration pattern of the respondents

The above figure was estimated based on each age category and the likelihood of migration per household. Naturally, younger respondents had a stronger affinity because they were more active, willing, and able to pursue occupational migration. However, the inhibition to migrate was greatest among the elderly respondents, as evidenced by the figure, indicating their reluctance to change as a whole of all the households in the study area.

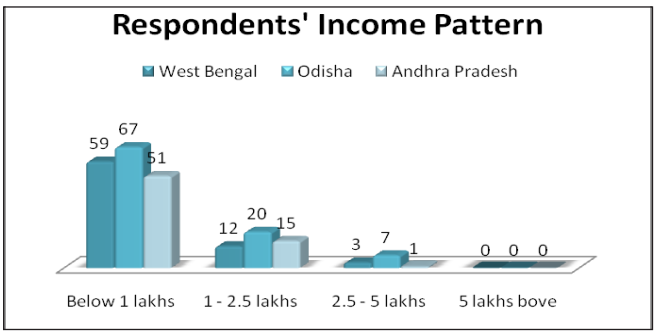

Fig. 3: Income based migration of the respondents

The data regarding the income pattern of the migrated respondents revealed that majority of the respondents had an annual income less than 1 lakh. This was evident that they were ready to migrate and work in order to have a better living as found by Kaur *et al*. (2011). And it was also seen that there was not a single respondent above 5 lakhs of annual income.

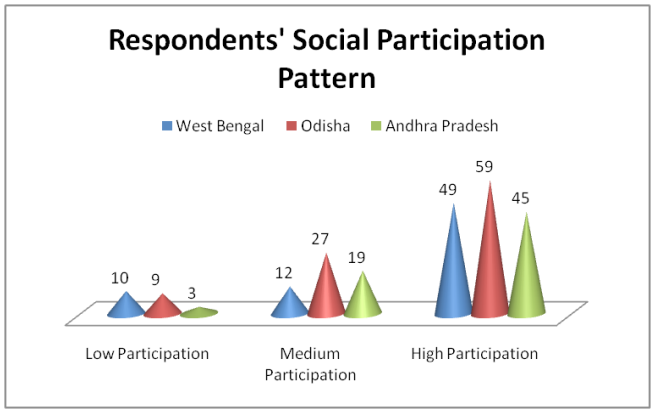

Fig. 4: Social participation-based migration of the respondents

One key thing that was disclosed from the data regarding the patter of social participation of the migrated respondents was that they had high level social participation skill which helped them to migrate in search of jobs outside the village, district, state or country across the three states.

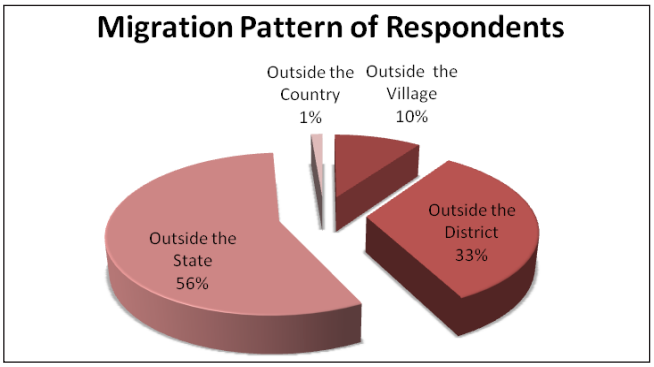

Fig. 5: Distance based migration pattern of the respondents

From the above figure it was deduced that, occupational migration had been undertaken by majority of the respondents out of the state (58.33%) followed by outside the district (31.94%), outside the village and outside the country (1%). However, out of the state provided a steady income on the condition that they were contract-bound and were not able to leave without completing their assigned period, which was a probable reason for the rise of out of state migration. The data was in line with the results of Kalkoti (2014) Vinaya and Shivamurthy (2018 and 2021), Patel et al. (2022).

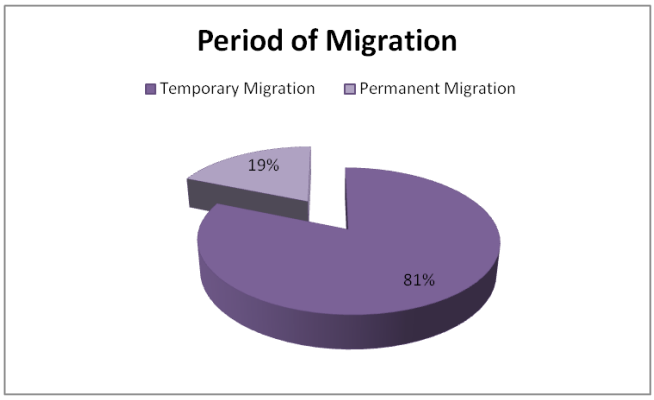

Fig. 6: Respondents migration period pattern

Time Period of Migration denoted the pattern of migration undertaken over time. It was divided into two categories based on time: temporary migration and permanent migration. In the study areas, temporary migration (81%) was observed among majority of the respondents across the three steps followed by permanent migration (19%). The data was in line with Keshari and Bhagat (2012).

Relationship between Independent variables with the Dependent variables

Table 3: Correlation of specific socio-economic characters with the dependent variables

(n=235)

Sr. No.	Socio-Economic Characters	"r" Value	
		Migration Distance	Migration Period
X_1	Gender	0.116 NS	0.471*
X_2	Age	0.601*	0.345**
X_3	Income	0.800*	0.574*
X_4	Social Participation	0.363*	0.711*

** Significant at 1% level (2-tailed)
* Significant at 5% level (2-tailed)

Table 3 inferred that the correlation coefficient (r) value between age, income and social participation were positively related and significant with the migration distance from their original place of living. Whereas the correlation coefficient (r) value between gender and migration distance was 0.116, which showed a moderate positive association and had no significant relationship with migration distance.

Coming to the correlation coefficient (r) value between gender, age, income and social participation were positively related and significant with the migration period.

Table 4: Regression analysis of specific socio-economic characters with the dependent variables:

Particulars	R square value	Adjusted R square value	Standard Error	Observation
Migration Distance	0.78268239	0.710644743	0.202085142	235
Migration Period	0.69389123	0.618915472	0.110875323	235

The R-squared value of 0. 78268239 and 0.69389123 suggested that the independent variables included in the regression model explained approximately 78.26% and 69.38% of the variability observed in the dependent variable, Migration Distance and Migration Period. This indicated a strong relationship between the independent variables and Migration Distance and Migration Period. The remaining 21.74% and 30.62 of the variability could be attributed to other factors not included in the model or inherent variability within the data. Overall, the R-squared value suggested that the regression model fit the data well and provided a reliable estimation of the relationship between the independent variables and dependent variables.

CONCLUSION

Because of the shift in occupation from farming, there has been a changing unevenness in agriculture, often resulting in negative environmental effects. This may not have an immediate impact, but it may have long-term consequences for future generations. A modern policy approach to agricultural education, rural banking loan system, and so on is needed to mitigate the speculative effects of occupational migration. Most significantly, a shift in emphasis towards agriculture through a magnified perspective that transforms it into a multifaceted economic and livelihood resource.

FURTHER RESEARCH

The area of the study was limited to one district from each state of West Bengal, Odisha and Andhra Pradesh only but the problem is wide around the country and may be taken up for different states of the country. The study was confined to only 235 respondents from 6 different villages which can be further taken on a larger area with a greater number of respondents for more accurate data.

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CONFLICT OF INTEREST

This is to declare that there is "No conflict of interest" among researcher.

REFERENCES

Barichelle, R., (2020). The COVID-19 pandemic: Anticipating its effects on Canada's agricultural trade. *Canadian J. of Agril. Eco.,* 68, 219–224.

Bhagat, R.B, (2012). Internal Migration in India Initiative-Summary Report. In: Proceedings of National Workshop on Internal Migration and Human Development in India. UNESCO-UNICEF Publications, 18 December, New Delhi.

Camlin, C.S., Snow, R. C. and Hosegood, V. (2014). Gendered patterns of migration in rural South Africa. *Population, Space and Place* 20(6), 528–551. DOI https://doi.org/10.1002/psp.1794.

Ceylan, R.F., Ozkan, B. and Mulazimogullari, E. (2020). Historical evidence for economic effects of COVID-19. *The European J. of Health Eco.,* 21: 817–823.

Dandekar, A., Ghai, R., (2020). Migration and reverse migration in the age of COVID- 19. *Economic and Pol. Weekly* 55 (19): 28–31.

Eileen, B. N., Cosmas K. L., Rowland, C., Noel, T., Jean and C. R., Patricia. O. (2021). Immediate impacts of COVID-19 pandemic on bean value chain in selected countries in sub-Saharan Africa. *Agril. Sys.*,188, 103034.

Galanakis, C.M. (2020). The food systems in the era of the coronavirus (COVID-19) pandemic crisis. Foods 9: 523.

Harris, J., Depenbusch, L., Pal, A.A., Nair, R.M. and Ramasamy, S., (2020). Food system disruption: Initial livelihood and dietary effects of COVID-19 on vegetable producers in India. *Food Security* 12(4), 841–851.

Kalkoti, G. (2014). Status of rural migration - Need for development initiatives. *Kurukshetra* 62(11): 14–17.

Kaur,B., Singh, J. M., Garg, B. R., Singh, J. and Singh, S. (2011). Causes and impact of labour migration: A case study of Punjab Agriculture Department of Economics and Sociology, Punjab Agricultural University, Ludhiana, Punjab. *Agril. Eco. Res. Rev.,*

24: 459-466, 459–466.

Keshari, K. and Bhagat, R.B. (2012). Temporary and seasonal migration: Regional pattern, characteristics and associated factors. *Eco. & Polit. Weekly,* 47(4): 27-36.

Kumar, S. and Anwer, M. (2020). Agricultural wages in India: Trends and determinants. *Agril. Eco. Res. Rev.,* 33, 71–79.

Lese, V., Wairiu, M., Hickey, G.M., Ugalde, D., Salili, D.H.,Walenenea, J., Tabe, T., Keremama, M., Teva, C., Navunicagi, O., Fesaitu, J., Tigona, R., Krishna, D., Sachan, H., Unwin, N., Guell, C., Haynesf, E., Veisa, F., Vaike, L., Bird, Z., Haapio, M., Roko, N., Patolo,S., Annika, R. D., Sashi, K., Pitakia, T., Jowalesi, T., Siosiua, H., Judith and F. and Alastair, C.W. (2021). Impacts of COVID-19 on agriculture and food systems in Pacific Island countries (PICs): Evidence from communities in Fiji and Solomon Islands. *Agril. Sys.,*190: 103099.

Lin, B.X. and Zhang, Y.Y. (2020). Impact of the COVID-19 pandemic on agricultural exports. *J. of Integrative Agri.,* 19(12), 2937–2945.

Lindsay, M.,Jaacks, L.M., Divya, V., Rajesh, S., Roy, A., Prabhakaran, P. and Ramanjaneyulu, G.V. (2021). Impact of the COVID-19 pandemic on agricultural production, livelihoods, and food security in India: baseline results of a phone survey. *Food Security* 13: 1323–1339.

Mishra, A., Bruno, E. and Zilberman, D. (2021). Compound natural and human disasters: managing drought and COVID-19 to sustain global agriculture and food sectors. *Sci. Total Envi,* 754: 142210.

Moosavi, J., Fathollahi-Fard, A. M. and Dulebenets, M. A. (2022). Supply chain disruption during the COVID-19 pandemic: Recognizing potential disruption management strategies. *Int. J. Disster, Risk., Red.,* 75: 102983. https://doi.org/10.1016/j.ijdrr.2022.102983

Muneer S, Swamy DK, Lavanya T, Supriya K. COVID-19 Pandemic: Impact of Agricultural Labour Migration on Income Levels of Farmers in Telangana. *Int. J. Bioresearch Stress Manag.,*14(1):169-177.

Parida, J.K. (2019). Rural-Urban Migration, Urbanization, and Wage Differentials in Urban India. In: Jayanthakumaran, K., Verma, R., Wan, G., Wilson, E. (eds) Internal Migration, Urbanization and Poverty in Asia: Dynamics and Interrelationships. Springer, Singapore. https://doi.org/10.1007/978-981-13-1537-4_8

Parida, J. K. (2015). Growth and prospects of non-farm employment in India: Reflections from NSS data. *The J. of Industrial Stat.,* 4(2): 154–168.

Patel, M. R., Vinaya Kumar, H. M. and Chauhan, N. B. (2022). A scale to measure self-confidence of rural youth about vegetables farming. *Guj. J. Ext. Edu.,* 34(1):50-52.

Ramakumar, R. & Kanitkar, T. (2020). Impact Of COVID-19 Pandemic On The Indian Economy: A Critical Analysis. *Investigación Económica,* 80(315): 3-32. https://doi.org/10.22201/fe.01851667p.2021.315.76845

Reardon, T., Mishra, A., Nuthalapati, C.S.R., Bellejmare, M.F. and Zilberman, D. (2020). COVID-19's disruption of India's transformed food supply chains. *Eco. & Political Weekly* 55(18), 18–22.

Richards, T. J. and Rickard, B. (2020). COVID-19 impact on fruit and vegetable markets. *Canadian J. of Agril. Eco.,* 68: 189–194.

Roubik, H., Lostak, M., Ketuamaa, C.T., Prochazka, P., Soukupova, J., Hakl, J., Karlike and P., Hejcman, M. (2022). Current coronavirus crisis and past pandemics - What can happen in post-COVID-19 agriculture. Sustainable Production and Consumption, 30: 752–760.

Singh, A.K., Singh, L. and Kumar, S. (2020a). Impact of COVID-19 on Agriculture and Allied sectors. *J. of Community Mob. and Sustainable Development* 15(1): 8–16.

Singh, B., Shirsat, P.B., Jat, M.L., McDonald, A.J., Srivastava, A.K., Craufurd, P., Rana, D.S., Singh, A.K., Chaudary, S.K., Sharma, P.C., Singh, R., Jat, H.S., Sidhu, H.S., Gerard, B., Braun, H. (2020b). Agriculture labour, COVID-19, and potential implications for food security and air quality in the breadbasket of India. *Agril. Sys.,* 185, 102954.

Srivastava, S.K., Chand, R. and Singh, J. (2017). Changing crop production cost in India: Input prices, substitution and technological effects. *Agril. Eco. Res. Rev.,* 30: 265–259.

Stephens, E.C., Martin, G., Wijk, M., Timsina, J. and Snow, V. (2020). Editorial: Impacts of COVID-19 on

agricultural and food systems worldwide and on progress to the sustainable development goals. *Agril. Sys.,* 183: 102873.

Torero, M. (2020). Without food, there can be no exit from the pandemic. *Nature,* 580(7805): 588–589.

Tyagi R., Minz S. (2023). COVID-19 Pandemic : A Disaster In The Indian Economy. *Indian J. Soc. & Pol.* 10 (1): 61-66: 2023

Vinaya Kumar H. M. and Shivamurthy M. (2018). Adaptation to Mitigate Climate-Induced Crisis by Farmers in Coastal Zone of Karnataka, India. *Current J. of App. Sci. & Tech.,* 30(5): 1-13 DOI: 10.9734/CJAST/2018/41134

Vinaya Kumar H. M., and Shivamurthy, M. (2021) Factor influencing fishery-based farmers' perception and their response to climate-induced crisis management. *Environ. Dev. Sustain*., 23: 11766–11791. Springer, https://doi.org/10.1007/s10668-020-01141-x

Weersink, A., Massow M., Bannon, N., Ifft, J., Maples, J., McEwan, K., McKendree, M.G.S., Nicholson, C., Novakovic, A., Rangarajan, A., Richards, T., Rickard, B., Rude, J., Schipanski, M., Schnitkey, G., Schulz, L., Schuurman, D., Schwartzkopf-Genswein, K., Stephenson, M., Thompson, J. and Wood, K. (2020). COVID-19 and the agri-food system in the United States and Canada. *Agril. Sys.* 188: 10303

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