The Training Needs of the Agricultural Extension Guides and Local Leaders in the Use of Agricultural Mechanization at El- Qalubia

summary-Agriculture mehanization is considered ’of the mostimport~t vital programs in the field ot development. despitei ts v~i.talimportance it :faced tremendods problems. The mostserious problems are (a) the scaricty of researches andstudies that deal with the determination of t:t;’aininnqeedsfor both agricultural extensionists and local extensionleaders in the fluid of using agricUltural mechanism (b)Absence of the above mentioned’ research and studies forhortitculture husbandry engineers (c) not determining themost important personal and situational independent variablesof the agricultural leaderships with effect training needs.This can be done through a way with reflects stages oranqles that depend on this satisfaction. It should also~uDt l¢now~.dge~related to the idea and how to carry out.~jeet.i ••• ~or til. at.udy:- Ob1cctive of this study could be summarized as follows : 1- To determine the differences between the needs ofhortculture husbandry engineers and agricultural.~en.ioni.ts for the knOWledge, operation practices andmaintenance practices of the mechanical plower.2- To deteraine the differences between the needs of localextension leaders, ownerrlnq and not ownerinq mechanicalplower, concerning their Ca) knOWledge related to awaringabout it (b) knOWledge related to how to operation (c)knowledge related to how to .a1ntenance Cd) it. operationpractipes and ee) it•• aintenance practices.(3) To determine the relationship between the need degrees ofharticulture husbandry enginettrs· and aqriculturalextensionis~s concerning knOWledge, operation practicesand maintenance practices of the mechanical plower andeach of the following independent variables age, degree ofrurality, degree of agricultural experience, degree ofemployment experience, degree of education in the field ofagricultural mechanization nUmber of holded meetings andpanels discussion in the field of using agriculturalmechanization, number of resources for obtaining knowledgeabout agricultural mechanization number of trainingprograms in the field of agricultural mechanization,degree of individual ownership for farm machineary, degreeof individual use of farm machineary, degree of attitudestowards form machinary, degree ot attitudes towardsagricultural mechanical stations, degree of family.::»:ownership to farm machineary and degree of family use offarm machineary.(4) To determine the relationship b~tween the degrees of needfor local extension leaders owners the mechanical plowerconcerning their (a) knowledge related to awa~inq about it(b) knOWledge related to how to operation (c) knowledgerelated to how to maintenance Cd) its operation practices,and ee) its maintenance practices and the fOllowingindependent variables : age, nUmber of Children, degree offamily members participation in the farm work, degree ofeducation, nUmber of other business that individual isworking with in addition to agriculture, size ofagricultural ownership, number of locations on which theindividual has his agricultural ownership, nUmber ot ownedlabor farm animals, degree of attitudes towardsagricultural machines, degree ot attitUdes towardsagricultural mechanical station, degree ot educational andoccupational ambitons ot sons, degree of contact withchange agents, degree of participation in those extensionactivities related to agricultural ~echanics, degree ofexposure to mass communication means, degree ofcosmopoliteness, number of training programs in the fieldof agricultural mechanics number ot owned farm machainearyand degree of farm machineary use.Researcb metbods ITo achieve the

objective~ of ~his study the followingprocedures were carried outTo collect neded data for statistical use, three sampleswere selected randomly; sixty agriculture extensionists,sixty horticulture husbandry engineerinq and 104 localextens'ion leaders,_ Two types of questionnaires were cpntructed to get theresponses of agriculture extensionists horticulturehusbandry engineers and local leaders.Each questionnaire continued two main parts; the firstpart consisted of the studied independent variables and thesecond part contained questions to measure needs forknowledge and practices concer~ing the mechanical plower.Data were collected in winter of 1990 by personalinterviews using a pre-tested questionnaire.Data analysis :Mann-Whiteny test, simple correlation coefficient andstep-wise mUltiple correlation and regr••sion analysis werethe main statistical tools used for data analysis.Research findings :1- Agriculture extensionists and horticulture husbandryengineers were in agreat need for all knowledge andpractices related to mechanical plower.2- It was found that the need of horticulture extensionistsin relation to all knowledge and practices relat relatedto operation of the mechanical plower. It waS found alsothat the difference between the need of both categorieswas very high significant.)_ In relation to mechanical plower maintenance, it was foundthat the need for both horticulture hasbandry engineer andagriculture extensionists was rel at!'vel y higher. It wasalso found that hosticulture husbandry engineer need washigher than that of aagricul ture extensionists in someitems under study. On the other hand, agricultureextensionist was higher than that of horticulturehusbandry need in some other different items. However, ingeneral the difference between each fo their needs was notsignificant .t;- It was found that all local extension' leaders with andwithout ownership were in need for all knowledge andpractices under investigation~) 5- It was found that local extension leaders need with andwithout ownership varied from a practice to another andfrom a piece type of knowledge to another.6- It was found that the need of local extension leaders,with and without ownership, for knowledge about themechanical plower was low. The difference between theirneeds was not significant.7- The need of those local extension leaders not ownaring amechanical plower for knowledge related to operation andmaintenance of the plower was higher than that of localextension. leaders who own a mechanical plower. Thedifference found between their . needs was highlysignificant.9- Number of resources for obtaining knowledge aboutmechanical plower and degrees of attitude towards farmmachineary were jointly contributed to 61% of the totalvariation interpreting for the need degrees ofhorticulture husbandry engineers concerning knowledgeabout mechanical plower.10- Degrees of employment experience, degrees of familyownership of farm machineary number of resources forobtaining knowledge about agriculture mechanization werejointly contributed to 58.8t of the tatal variationinterpreting the need degrees of agriculture extensionistsfor knowledge concerning mechanical plower.11- Training degrees the field of agricultural mechanizationwere contributed to 20% of the total variation associatedwith the need degrees of horticulture ~usbandry engineersfor practices engineers for practices concerning operationof the mechanical plower.12- Degrees of family ownership of farm machinary degrees ofeduation in the field of agriculture mechanization werejointly contributed to 26.7t of the total variationinterpreting the need degrees of agriculture extensionistsfor practices concerning operation m~chanical plower.13- Number of training in the field of agriculturalmechanization, degrees of ownership for farm machinearywere jointly contributed to 29.3% of the total variationinterpreting the need of horticulture husbandry engineerfor practices concerning maintenance mechanical plower.14- Family ownership degree of farm machineary, trainingdegrees in the field of aqricultural mechanization werejointly contributed to 30.6' of the tatal variationinterpreting the need of agriculture exten.ionists forpractices concerning maintenance mechanical plower.15- The degrees exposure to the means of mass communicationwere contributed to 18t of the ta~al variation associatedwith knowledge need degrees for those local extensionleaders who have mechanical plower ownership in relationto its awarness.16- Number of owned labor farm animals, degrees ofcosmopliteness were jointly cont]~ibuted to 21.9 of thetotal variation interpreting the need degrees of thoselocal extension leaders who have mechanical plower inconcerning how to operate it.17- Null erof training programs in the field of agriculturemechanization were contributed to 11 of the totalvariation associated the need deqrees of local extensionleaders who have m.echanical plower in concerning how tomaintenance it.18- Null er of owned labor fann ardmals, degrees of

farmmachineary use, were jointly contributed to 9.1t of thetotal variation interpreting the need degrees of thoselocal extension leaders who have mechanical plower foroperation practices.19-Number training programs in tne field of agriculturemechanization were cotributed tc 15t of total variationassociated the need degree. of tho.. loeal extensionleaders who have mechanical :j)lower for' maintenancepractices.The previous results ind~cat:e. the importance ofconsidering in the variation in the n ds degr.e ofhoriculture haspundry. a9ricultural ext.nsioni.~s and localextension leaders when desi9nin9 and carrying out anyextension training proqra_s in the field of aqricul turalmechanic.