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HUMAN RESOURCE DEVELOPMENT FOR AN EFFECTIVE AGRICULTURE EXTENSION TOOL: AN EMPIRICAL STUDY OF BALUCHISTAN PROVINCE

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ABSTRACT

Present study was conducted to determine the Human Resource Development (HRD) imperatives or trends in provincial agricultural extension advisory services and education in order to identify the perceptions and paradigms. A skilled and trained worker is commonly acknowledged as one of the greatest and essential asset for any organizations. Present study was carried out in Quetta district, Baluchistan purposively by reason of proximity of core agriculture extension activities, educational actions and time available with the researchers. Keeping in the view the characteristics of the population one hundred (100) respondents were constituted as the target population by using simple random sampling. The results revealed that most (44%) of the respondents were of age between 31 to 40 years followed by more than half (54%) respondents holding degree of B.Sc. Significant differences in the perceptions of respondents were checked in nine (9) out of fourteen (14) categories about HRD imperatives or trends by using ANOVA. Further, significant differences were also observed in eight (8) out of fourteen (14) statements about HRD imperatives or trends by using t-test. Present HRD model elaborate the interventions and significances for extending HRD efforts about need assessment with the term of discourse a wide-ranging issues within organization. Based on results following recommendations were suggested. Generally, there is an information gap between public extension and academia which should be bridged by means of operative HRD efforts and holistic approaches it is therefore recommended that conference, workshop, seminar and exhibition should be carried out so as to promote the sharing of new technology.

Keywords: Baluchistan, Extension, Human resource development, Pakistan, Perception.

INTRODUCTION

Agricultural Human Resource Development (HRD) plays a vibrant and catholic fragment in any institution in order to achieve the tasks of institute at maximum professionally genre with the term of suitable use of its physical, financial, and social capitals resources. The sequential efficiency of any institutions as a whole obtained through the proficient functioning of human resources within an organization (Karbasioun & Mulder, 2004). The purpose of human resource development has to pinpoint the altogether available resources within organization so that pursue to realization reckoning—both personal and organizational achievement. The dual essential objectives of human resources development

were (I) individual & organizational learning and (II) individual & organizational performance (Watkins & Marsick, 1995; Swanson, 1996; Ruona, 2000). HRD efforts with the term of productivity enhancer and dynamic driver of any organization (Haslinda, 2009). Human Resource Development was a productive factor about technology-oriented training, capacity building, career planning and refining the whole institutional development process intricate in application, monitoring, evaluation, inquiry and extension packages. Training was regarded as key module of Human Resource Development. The training is the increase the competency level and erect the capacity building of the employee's as well to strengthen of adversary services with the context of diffusion valuable agricultural technology towards the intended farming community. Efficient training, development & management, greatest exploitation of

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resources, knowledge and skills of extension employees interrelated with the procedure of agriculture growth. In this regard the human resource development vision accelerates the competency level of the employees and to bridge the possible gaps on an incessant basis. However, the foci theme of human resources development has been abandoned by the various agricultural extension services all over the realm (Chizari *et al.*, 2001). There are clearly numerous limiting factors which are synchronously prevailing in the respect of Human resource development. Missing of liaison among productive sectors, top-down style, structural changes, discard the role of farmers in planning and execution likewise influenced the Human resource development activities in entire extension systems (Pezeshki-Raad *et al.*, 2001). Developments and concerns explicitly distressing entire agriculture extension arrangement and purpose such as funding problems; exchanging clientele needs; reformation, downsizing and human resource development Warner *et al.*, 1996; Seevers, *et al.*, 2007; Morse, 2009). The dawn of 21st century not only changing extension organizations trends but also enhances the contextual knowledge of the employees with the term of HRD (Lawler, 1994; Lucia & Lepsinger, 1999; Dubios *et al.*, 2004).

Agricultural extension services considered as to refining the well-being of rural farmers through the advisory services so as to build up the farmer's capacity and socio-economic condition to revolutionize by providing access to useful information's and facts. Currently, extension services have diverse range of activities such as to facilitating farmers, training for learning, dealing with marketing problems, resource conservation, food security, agricultural production, food safety, and youth development programs.

Rationale of the Study: Baluchistan province has elaborate extension system directed by the Director General of agriculture extension wing (Mellor, 1994; Mengal *et al.*, 2014; Mengal, 2015). Provincial extension system has faced some sort of chronic issues such as absenteeism of extension field staff, politically recruitment of staff, passive geographical mobility, low competency level, lack of accountability, insufficient access to new learning and communication technology of extension field staff. As results the role of extension services at present day goes beyond their line of inquiry, scope and mandate regarding technology transfer process. In addition, low dynamism still exists within extension system and advisory services have not been

greatly successful in reaching the totally groups of farmers. In this alarming status quo, consideration must be paid to limiting factors which are responsible for poor performance of extension advisory services at province level and suggest the ways and means to improve these sector. Current efforts not only was planned to search the challenges of human resource development but also enhance to pace the dynamism in extension advisory services and education set-up. In this regard, present research was productive for researchers, planners and practitioners who are pursuing to explore, conceptualize and development the discipline of human resource development as optimistic tools (Woodall *et al.*, 2002). In order to full of zip and enterprises efforts towards HRD initiatives, therefore, present research intended was to addresses workplace aspects of the respondents regarding execution of human resource development practices in Baluchistan province of Pakistan, in light of changing trends in educational vision and agriculture yield aspect.

Objectives: Following specific objectives were formulated:

1. To find out the demographic profile (as an independent variable) of the respondents.
2. To determine the perceptions of respondents regarding the execution of human resource development practices in study areas.
3. To study the differences in perceptions of respondents regarding the HRD imperatives or trends.
4. To detect the gap and develop the human resource development model for the upgrading extension services and educational structure of the province.

MATERIALS AND METHODS

Present study was carried out in Quetta district of Baluchistan selected purposively by reason of proximity of core agriculture extension activities, educational actions and time available with the researchers. Keeping in the view the characteristics of the population there were three groups selected in present study; group 1st consisted Extension Field Staff (EFS) of Extension Wing government of Baluchistan, group 2nd contained extension field staff of Baluchistan Agriculture College (BAC) and group 3rd comprised of University of Baluchistan (UOB) respondents (Lectures & Assistant Professors). A sample size of hundred (100) respondents of the present study was randomly selected. From the Extension Wing a sample size of 40 extension field staff, from the Baluchistan Agriculture College thirty (30)

extension field staff, whereas thirty 30 respondents from University of Baluchistan were also selected as sample, because the respondent's population of these organization/ institutions was about similar in size and shape. The sampling frame was obtained from University of Baluchistan and the office of Director General, Agriculture Extension Wing, Quetta Baluchistan. Interview schedule for literate respondents was developed so that ensures that objectives of present research were fully interpreted and encouraged to lucid their perceptions and ideas in a constructive and open mode. Present research pinpoint comparing on the current perception of respondents regarding execution of human resource development. For this purpose raw data were collected with the help of interview schedule based on objectives of the study. HRD imperatives or trends consisting of 28 items as constructs on a five point Likert scale ranging from one to five, 1 (not at all important), 2 (slightly important), 3 (somewhat important), 4 (very important) and 5 (extremely important) was used in the study (Likert, 1932). Pre-testing was conducted using the tool as interview schedule on 10 respondents of Extension Wing in Quetta district who were not actually comprised in the definite sample of the study. The minimum

reliability coefficient was 0.72 this tendency indicate that the interview schedule were internally reliable. Cronbach's Alpha program portrayed that score was .720 to .747 which showed the interview schedule was admirable as suggested by Nunnally (1967). The sample size for the populations were estimating by using the Krejcie & Morgan (1970) and McCall (1980) table "choosing sample size from a assumed population" at the 0.05 percent error rate. To analyze the results, various statistical measures such as frequency, mean score, standard deviation, rank order, standard error differences, F-value and T-value were performed through the SPSS (22) the contrast among and between for the variables as constructs analysis of variance (Duncan Multiple Range Test) and Independent Samples t-test was performed to signify the perceptions of the respondents on 0.05 alpha level.

RESULTS AND DISCUSSION

Demographic information: Demographic profile and attribution of the respondents play an important role and perhaps accelerate the rate of adoption process about technology transfer. In this regard the respondents were asked to given their current perceptions about demographic profile as shown in figure1-2.

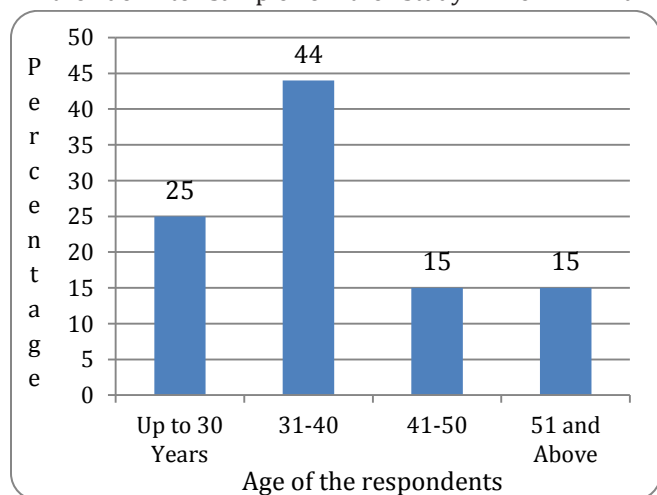


Figure 1. Age of the respondents.

It appeared from the data depicted in Figure 1, that percentage of respondents falling in age bracket of 31-40 years was prominent (44%) followed by the 25% respondents fallen in the age category of up to 30 years. In case of education, all the respondents were literate to varied level of education. More than half (54%) respondents were holding bachelor degree followed by one fifth respondents (24%) who were holding master degree as shown in Figure 2. Least percentage was of

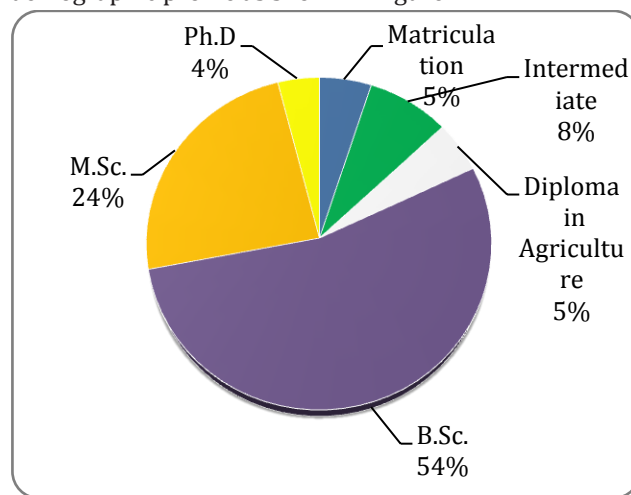


Figure 2. Educational Level of Respondents.

matriculated respondents while 4% respondents were holding highest degree PH.D.

The results of One-Way (ANOVA) revealed that highly significant differences at the (p ≤0.05) level about the perceptions of respondents on following imperatives or trends: training and growth (F=15.838, p ≤0.05), organizational managing (F=82.955, p ≤0.05), livelihood development (F=57.243, p ≤0.05), better technology process (F=10.678, p ≤0.05), communication skills

($F=10.155$, $p \leq 0.05$) management and supervision ($F=9.629$, $p \leq 0.05$). Likewise significance variation was found on following statements: eradicating the skill gap ($F=3.417$, $p \leq 0.05$), directorial leadership ($F=4.735$, $p \leq 0.05$) and relationship building ($F=6.822$, $p \leq 0.05$) category was significant ($p \leq 0.05$). Segregated data of human resource development based upon respondents perceptions such as: HRD as profit enhancer ($F=.141$, $p \leq 0.05$), long-term learning process ($F=1.661$, $p \leq 0.05$), problem-solving ($F=2.593$, $p \leq 0.05$), marketing trend ($F=.322$, $p \leq 0.05$) and program planning ($F=.645$, $p \leq 0.05$) did not demonstrate any significant discrepancy (p

≤ 0.05) as shown in Table-1. By and large, the respondents observed that the HRD imperative or trends not at all important as a dynamic tool in the agriculture extension services and education system. In this connection, vigorous HRD theme among public extension, Agriculture College and University of Baluchistan linger on non-significant about propagation of new technologies. Significant differences in the perceptions of respondents were measured in nine (9) out of fourteen (14) categories about HRD imperatives or trends. Hence, it was concluded that the productive sectors did not properly use the HRD imperatives or trends which increased the skill gaps.

Table 1. Respondents perceived scores regarding HRD activities.

S#	HRD imperatives or trends	Extension Wing		Agriculture College		University of Baluchistan		F. Value	Sig*
		M	SD	M	SD	M	SD		
1	Training & growth	2.70A	1.043	3.70 B	.702	3.97 B	1.189	15.838	.000**
2	Organizational managing	2.33 A	1.047	3.67 B	.606	4.73 C	.450	82.955	.000**
3	Livelihood development	4.38 C	1.005	3.10 B	.803	2.10 A	.803	57.243	.000**
4	Better technology progress	3.40 B	1.429	2.67 A	.711	2.17 A	.986	10.678	.000**
5	HRD as profit enhancer	3.33 A	1.269	3.47 A	1.008	3.37 A	.999	.141	.869 NA
6	Eradicating the skill gap	3.50 A B	1.320	2.97 A	.809	3.77 B	1.382	3.417	.037*
7	Long-term learning process	3.23 A	1.250	2.83 A	1.147	2.77 A	1.006	1.661	.195 NA
8	Communication skills	3.58 B	1.299	2.40 A	.894	3.53 B	1.252	10.155	.000**
9	Directorial leadership	2.25 A	1.127	2.17 A	.791	2.90 B	1.094	4.735	.011*
10	Problem-solving	2.80 A	1.285	3.10 A B	1.213	3.47 B	1.106	2.593	.080 NA
11	Relationship building	2.43 B	1.130	1.83 A	.379	2.73 B	1.112	6.822	.002*
12	Management & supervision	3.80 B	1.344	2.93 A	1.172	2.60 A	.968	9.629	.000**
13	Marketing trends	2.78 A	1.271	2.63 A	1.033	2.87 A	1.042	.322	.726 NA
14	Program planning	2.95 A	1.449	2.90 A	1.094	3.23 A	1.073	.645	.527 NA

Scale * 1=Not at all important, 2=Slightly important, 3=Somewhat important, 4= Very important, 5=Extremely important
 Significant at 0.05 Level; SD = Standard deviation; RO=Rank order; NA=Non-significant; * *Significant at 0.0 Level

An Independent Samples t-test was used in order to determine if significant differences happened between public extension field staff and academia respondent's regarding entire HRD imperatives or trends. The replies were verified on a 1 to 5 point Likert-type scale where 1 was stand for "not at all important", 2 "slightest important", 3 "somewhat important", 4 "very important", and 5 was "extremely important". The outcomes are obtainable in Table-2. In order to stimulate the HRD imperatives or trends as strategic assets with the term of knowledge transmission the present research was conducted. The segregated data based on HRD imperatives or trends revealed that program application ($M = 3.60$ "Public Extension", $M = 2.80$ "Academia"), teamwork & leadership ($M = 4.33$ "Public Extension", $M = 2.28$ "Academia"), self-direction ($M = 1.73$ "Public

Extension", $M = 4.30$ "Academia") and extension program development process ($M = 3.98$ "Public Extension", $M = 2.02$ "Academia") were highly significant difference ($p \leq 0.05$). Whereas self-management ($M = 3.88$ "Public Extension", $M = 3.43$ "Academia"), incessant learning ($M = 4.03$ "Public Extension", $M = 3.62$ "Academia"), technology adoption and application ($M = 3.80$ "Public Extension", $M = 3.30$ "Academia") and resource management ($M = 3.95$ "Public Extension", $M = 3.17$ "Academia") were significant difference ($p \leq 0.05$). While program appraisal ($M = 3.18$ "Public Extension", $M = 3.50$ "Academia"), applied inquiry skills ($M = 3.75$ "Public Extension", $M = 3.70$ "Academia"), subject matter proficiency ($M = 4.25$ "Public Extension", $M = 4.05$ "Academia"), knowledge of extension ($M = 4.23$ "Public Extension", $M = 4.02$ "Academia"), know-hows level ($M = 4.33$ "Public Extension", $M = 4.33$ "Academia")

and able to utilize technology for program delivery (M = 4.13 "Public Extension", M = 4.10 "Academia") were found non-significant at ($p \leq 0.05$). Significant differences were observed in eight (8) out of fourteen (14) statements about HRD imperatives or trends as perceived by the

respondents. Hence, it was concluded that relatively deprived HRD trends emerged between the public extension and academia. This does not match the philosophy or mandate of human resource dimension in extension services.

Table 2. Public extension and academia perceived scores about HRD activities (n=100).

Sr.	HRD imperatives or trends	Public Extension			Academia			Std. err. diff.	t-value	Sig*
		M	SD	RO	M	SD	RO			
1.	Self-management	3.88	1.114	9	3.43	1.047	9	.222	-1.989	.050*
2.	Program appraisal	3.18	1.217	13	3.50	1.000	8	.232	1.402	.165 NA
3.	Program application	3.60	1.257	12	2.80	1.054	12	.241	-3.321	.001**
4.	Applied inquiry skills	3.75	.899	11	3.70	.743	6	.171	-.292	.771 NA
5.	Subject matter proficiency	4.25	.927	3	4.05	.769	4	.177	-1.130	.262 NA
6.	Incessant learning	4.03	.800	6	3.62	.846	7	.167	-2.443	.017*
7.	Knowledge of extension	4.23	.698	4	4.02	.792	5	.150	-1.385	.169 NA
8.	Teamwork and leadership	4.33	.731	1	2.28	1.027	13	.176	-11.618	.000**
9.	Technology adoption & app.	3.80	1.181	10	3.30	1.109	10	.235	-2.125	.037*
10	Know-hows level	4.33	.730	2	4.33	.655	1	.143	.058	.954 NA
11	Resource management	3.95	1.197	8	3.17	1.368	11	.259	-3.026	.003*
12	Self-direction	1.73	.960	14	4.30	.743	2	.180	14.334	.000**
13	Extension program development process	3.98	1.143	7	2.02	1.049	14	.226	-8.669	.000**
14	Able to utilize technology for program delivery	4.13	.966	5	4.10	1.037	3	.203	-.123	.902 NA

Scale * 1=Not at all important, 2=Slightly important, 3=Somewhat important, 4= Very important, 5=Extremely important
Significant at 0.05 Level; **Significant at 0.0 Level

By and large agriculture extension service is the responsible as prime vehicle to propagate and diffuse the latest technology to the farmers at province level. Agriculture extension services not only effective tools to enhance the yield but also escalation the socio-economic dimension. In extension system the HRD dimension were considered as the supportive tool and cornerstone which perhaps boast up to streamlining the entire technology transfer process. According to this human resource development model, the innovations is planned by using a four (4) phase structure such as needs assessment, design, implementation and evaluation (Jon & Randy, 2012). Present HRD model elaborate the interventions and significances for extending HRD efforts about need assessment with the term of discourse a wide-ranging issues within organization. Better planning content for the intervention is the part and parcel in the HRD themes. Owing to the suitable programs content and appropriate setting the theme of HRD in extension system can enhance in diverse edge. However, effective program plan should

be implemented as progress manner in extension system, joint objectives can achieved by effective HRD activities in extension system. Evaluation stage was considered as the final phase and imperative trends regarding HRD theme. In this connection, the intact extension objective can attained through the healthier and standardized transfer of technology.

CONCLUSION AND RECOMMENDATIONS

Word-wide human resource development is the vibrant and optimistic tools for development of organizations. Unproductive HRD activities within organizations not only adversely affect the entire working pattern and practice of organizations but also responsible to lag behind the operational process of organizations. Numerous shortcomings in systems initiate from the nonexistence of actual and constructive HRD imperatives or trends among productive system. The finding reveals The results revealed that most (44%) of the respondents were fall down in the age composition of 31 to 40 years and more than half (54%) of the respondents have

holding degree of B.Sc. Significant differences in the perceptions of respondents were checked in nine out of fourteen categories about HRD imperatives or trends by using ANOVA. Further, significant differences were also observed in eight out of fourteen statements about HRD imperatives or trends by using t-test. Present HRD model elaborate the interventions and significances for extending HRD efforts about need assessment with the term of discourse a wide-ranging issues within organization. Based on aforementioned results following recommendations were suggested. Human resources development is the key successive tool for widening the

organizations practice as an effective path. It is therefore recommended that public extension should make steady and systemic links with academia in order to regulate HRD imperatives and trends about state-of-the-art tools, knowledge-oriented trainings and capacity building programs. Largely, there is an information gap between public extension and academia which should be bridged by means of operative HRD efforts and holistic approaches it is therefore recommended that conference, workshop, seminar and exhibition should be carried out so as to promote the transfer of new technology and get feedback among productive sectors.

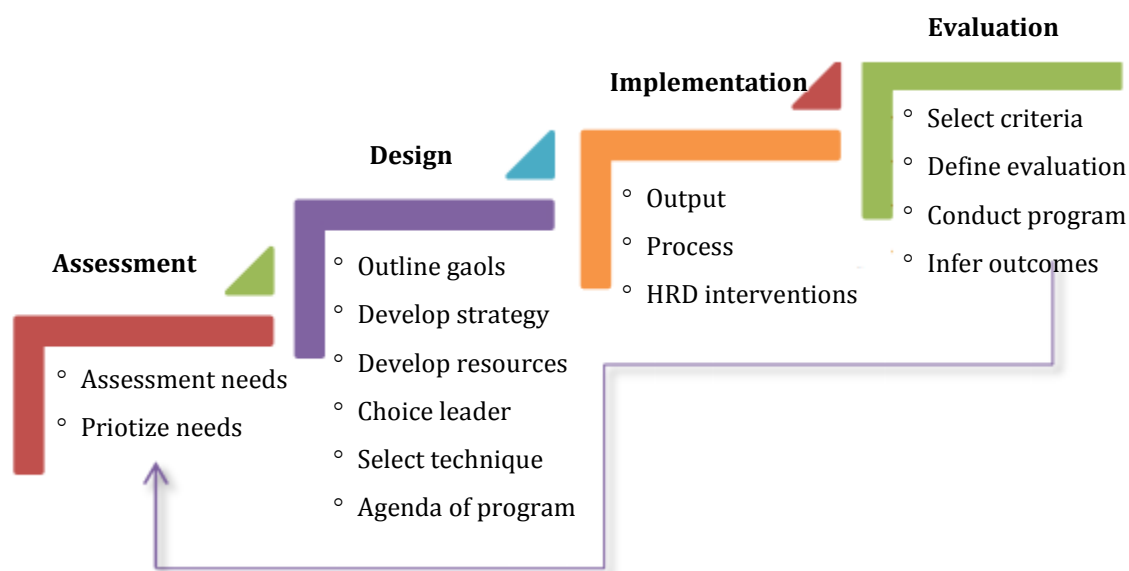


Figure 3. Human Resource Development Model.
Source: Jon & Randy (2012): Human Resource Development 6e.

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